

## Tilburg University

### Gender and leadership

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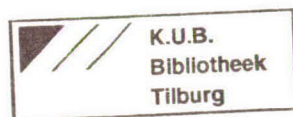
# Gender and leadership: A contextual perspective

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SCIENCES

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Marloes van Engen





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**Gender and leadership:  
A contextual perspective**

# Gender and leadership: A contextual perspective

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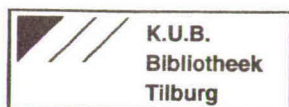
ter verkrijging van de graad van doctor  
aan de Katholieke Universiteit Brabant,  
op gezag van de rector magnificus, prof.dr. F.A. van der Duyn Schouten,  
in het openbaar te verdedigen ten overstaan van  
een door het college voor promoties aangewezen commissie  
in de aula van de Universiteit op vrijdag 14 december 2001 om 14.15 uur

door

Martine Louise van Engen  
geboren op 10 januari 1969  
te Oss

Tilburg University

Promotor: Prof.dr. T.M. Willemsen  
Copromotor: Dr. M. van der Leeden



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November 2001  
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## Chapter 1

### Introduction



At the start of the twenty-first century, the state of affairs on women's participation in leadership is both encouraging and discouraging. Though women have entered lower and middle management in vast numbers, they are still conspicuous in their absence in the higher ranks of management. This phenomenon is often referred to as the glass ceiling, 'a transparent barrier that [keeps] women from rising above a certain level in organizations' (Morrison, White, Van Velsor and the Center for Creative Leadership, 1987, p.13). Together with the increase of the labor force participation rate for women (i.e. the proportion of all adult women who were employed or seeking employment), women have entered the managing ranks of organizations in growing numbers in most countries around the world. In the Netherlands, the labor force participation rate of female adults increased from 25 percent in the 1960s, 40 percent in the 1970s to a participation rate of 51 percent in 1999. The male workforce participation rate fluctuated in the same period from almost 90 percent in the 1960s, slightly more than 80 percent in the 1970s to 76 percent in 1999 (Emancipatie in cijfers, 1995; Hooghiemstra & Niphuis-Nell, 1993; Keuzekamp & Oudhof, 2000). However, the participation of women in management positions did not show a similar development. Although the proportion of women in management positions has increased from 7% in 1977, 14% in 1994, to 21% in 1999, the proportion of female managers lags far behind the proportion of women who have management potential (Jaarboek Emancipatie, 2000). Noteworthy is that in sectors that have been female-dominated for decades, such as health care and education, the thickness of the glass ceiling is striking and has not declined in the last decades. Furthermore, in the top of organizations women are scarce (for instance, 5% in universities, less than 5% in the governing boards of industries) and this did not change much over the decades.

Since the 1970s, the glass-ceiling phenomenon has drawn the attention of many scientists and the quest to its causes and its obstinacy has resulted in a large body of literature with analyses at the societal, organizational, interpersonal and the individual level. At the societal level, research focuses on the society at large, the division of labor and power and the roles and role expectations that stem from this particular structuring of the society. The economic and normative societal pressures that lead to sex differences in career choices are examples of the object of study at this level. At the organizational level, research focuses on the structuring of organizations and on how personnel are handed through this structure. This type of research in general is aimed at organizational practices that (overtly or covertly) produce and reproduce inequalities between men and women, such as bias in selection and promotion processes, or unequal opportunities in mentoring, training and development routes. At the interpersonal level, the research focus is on how different relationships (such as supervisor-, peer-, subordinate- and external relationships) affect men and women of the organization differently. Leader-subordinate perceptions and evaluations, coalitions, conflict, minority status and impression management are among the topics that are studied at this level.

Finally, at the individual level the characteristics and experiences of individual men and women are the focus of attention. Traits, behaviors, non-work-roles, family background and all kind of human-capital variables are some of the topics at this level.

The theoretical foundation that is used in this dissertation crosscuts these levels of analyses. Gender and leadership will be studied from a contextual perspective. The focus in this dissertation is on the perception and evaluation of male and female leaders in differently gender-typed organizational contexts. It is argued that normative societal expectations about the roles that men and women in our society typically occupy will influence the behavior displayed by individual male and female leaders. These expectations will also color how male and female leaders will be perceived and valued by the people they are working with. Simultaneously, the organizational context sets the boundaries for leadership behavior and the perception and evaluation of this behavior. As it will be argued, organizational contexts are seldom gender-neutral, bringing along additional pressures to confirm or unconfirm certain gendered roles expected in a context.

With this focus on the pressures of societal expectations and the influence of the gender-typed context, this dissertation adopts a social psychological framework. In this chapter this framework will be elaborated upon. First, the nature and working of social roles, and more specifically gender roles, is explained. Second, it is explained that gender roles may not always match workplace roles. In particular leader roles may diverge from what people expect from, and prescribe for women. However, it will be argued subsequently that there is considerable variability in the extent to which the female gender role and a leader role do not match. It will be postulated that the variability resides in the organizational context in which a leader works, and in the behavior displayed by a leader that may be more or less out of role. In this dissertation the impact of the organizational context on the relation between gender and leadership is the central subject of study. Additionally, the relation between perceived identity of a manager in terms of 'masculinity' and 'femininity' on the perception and evaluation of male and female managers is examined. Having thus set the theoretical framework that is used in this dissertation, this chapter is concluded by a general overview of the book.

### *Terminology*

At the start of this chapter, two remarks on terminology need to be made. The first remark is on the use of the terms leadership and management. Leadership and management are sometimes distinguished as different processes. Management is often viewed as defined by a single position in the organizational hierarchy, whereas leadership is viewed as independent of position (Katz & Kahn, 1978). Accordingly, managers 'maintain' and rely on 'control', whereas leaders 'develop' and rely on 'trust' (Bennis, 1993); managers produce orderly results, concentrate on the short run and solve problems, whereas leaders produce significant change, develop long-term visions and produce innovative and creative opportunities (Klenke, 1996). Other scholars have challenged this view and posit that leadership refers to that part of organizational management



which deals with the direction and supervision of subordinates (Fiedler & Garcia, 1987), or claim that it is impossible to distinguish leaders from managers (Gardner, 1987). Most scholars have used the terms interchangeably (e.g. Stogdill, 1974; Yukl, 1989). In this dissertation the terms leader and manager, and leadership and management will also be used interchangeably, with some accents. In the theoretical parts, in which more general theories and processes are explained, the terms leaders and leadership are preferred. The term manager is preferred for those instances where people are explicitly defined, or define themselves as managers instead of leaders.

The second remark that needs to be made is on the use of the terms sex and gender. The distinction between gender and sex was introduced by Oakley in 1972 when she stated 'Sex' is a biological term: 'gender' a psychological and cultural one' (p. 158). In Unger and Crawford's (1992) words 'gender is what culture makes of the raw material of biological sex' (p. 18). With the introduction of the term gender, it became possible to denote the social construction of differences between men and women. Throughout this dissertation, the terms gender and sex are used as follows. The term 'gender' is used when attitudes, expectations and beliefs about men and women (including expectations about oneself as a man or woman) are addressed. The terms 'gendered' and 'gender-typed' are used when certain behaviors, objects, jobs, institutions, etceteras, have acquired a connotation of 'maleness' or 'femaleness', which is not inherent, but symbolic and socially constructed. Furthermore, the term 'sex' is used as one would use the terms 'man' or 'woman': to address actual persons. When addressing questions such as whether men and women differ on some kind of measurement, we will speak of 'sex differences'. By no means biological essentialism is (automatically) implied when talking about 'sex differences'. The term 'sex differences' is preferred instead of 'gender differences', as differences apply to physical men and women in a specific time and context, and not to symbolic appearances.

### *Preconceptions and Prejudice: Descriptive and Prescriptive Features of Social Roles*

*'When a 747 hits turbulence and the pilot's assurances waft over the intercom, passengers may be more soothed by a baritone than a soprano voice. Patients undergoing operations may be relieved to see the hirsute forearms protruding from the surgeon's gloves. There is evidence that men and women alike prefer having a man in charge.'*

(Rudman & Kilianski, 2000, p. 1315).

People's general ideas about what a manager or a leader is like does not fit the picture we have about women in general. The notions 'what a manager looks like' and 'the picture of women in general' are examples of social roles. Social roles can be defined as socially shared expectations about typical attributes belonging to a certain social positions or members of a particular social group. These expectations are based on the observations in daily life and thus have a *descriptive* quality (Biddle, 1979; Sarbin & Allen,

1968). Social roles are not only descriptive, describing what members of a particular social category are like and act like, but also *prescriptive*, containing consensual expectations about what a group of people ought to do or ideally should do (Cialdini & Trost, 1998). The normative character of social roles becomes visible when people do not adhere to the roles they are supposed to play: Violations of role prescriptions may lead to devaluation or even exclusion by others<sup>1</sup>.

*Gender roles* are consensual beliefs about the typical attributes of women and men. Social role theory (Eagly, 1987; Eagly, Wood & Diekmann, 2000) posits that the societal division of labor between the sexes defines a set of expectations or beliefs about male and female traits and behaviors. Women and men typically occupy different roles and develop skills and behavioral styles that are adaptive for these roles. The division of labor between the sexes can be noted in the family (men as primary providers and women as primary homemakers), in occupations (women more often occupy jobs in service oriented industries, men more in the manufacturing industries), and in positions of authority (men often possess positions of higher status, power and prestige than women do). In general, women's roles can be characterized as *communal* (reflecting a sense of communion, a concern for others and selflessness) and men's roles as *agentic* (reflecting agency, self-assertion and a desire for achievement) (Bakan, 1966; Wiggins, 1992). Stereotypes of typical characteristics of women and men reflect these agentic and communal attributes. People expect men to have more agentic qualities that are therefore called *masculine*, e.g. instrumental, competitive, assertive, independent, rational and competent; while women are expected to have more communal characteristics that are therefore called *feminine*, e.g. sensitive, warm, tactful, supportive and expressive (Broverman, Vogel, Broverman, Clarkson & Rosenkrantz, 1972; Deaux & Lewis, 1984; Willemssen & Fischer, 1999; Williams & Best, 1990). A consequence of the stereotypical expectancies of attributes of men and women is that women's chances of being perceived as possessing agentic attributes, such as task-competence and leadership ability, decrease. These expectations may result in a double standard: women have to outperform men to be perceived as equally competent or equally able as men (Biernat, 1995; Biernat, Manis & Nelson, 1991; Biernat, Crandall, Young, Kobrynowicz & Halpin, 1998; Foschi, 1996, 2000; Kanter, 1977).

Expectations about typical attributes of men and women not only describe what people think men and women are like (sex stereotypes), (e.g. Broverman et al., 1972; Williams & Best, 1990), but also influence individuals' ideas on their ideal selves (Wood, Christensen, Hebl & Rothgerber, 1997), as well as their evaluation of others in

<sup>1</sup> The descriptive and prescriptive character of social roles and stereotypes is a distinction that originates from Deutsch and Gerard's (1955) informative and normative social influence. Deutsch and Gerard defined informative influence as 'influence to accept information obtained from another as *evidence* about reality'. Normative influence was defined as 'influence to conform with (...) those expectations whose fulfillment by another leads to or reinforces positive rather than negative feelings, and whose nonfulfillment leads to the opposite, to alienation rather than solidarity (...) The term *another* is being used inclusively to refer to 'another person', a 'group' or to one's 'self' (original emphases)(p.629).



terms of these conceptions. Because gender roles act as social norms, violations of these norms are often punished by others. Research studying the consequences of behavior associated with the opposite sex shows that people who use gender role incongruent behavior are rated as less competent, likeable, and less qualified (e.g. Branscombe, Crosby & Weir, 1991; Butler & Geis, 1990; Costrich, Feinstein, Kidder, Marecek & Pascale, 1975; Falbo, Hazen & Linimon, 1982; Rojahn & Willemssen, 1994; Rudman, 1998; Rudman & Glick, 1999; van Engen, 1999). This effect is also known as the 'sex-role congruency explanation' or 'gender-role congruency hypothesis' (Holter, 1971; Nieva & Gutek, 1981). Relevant for the current study is research on work-related domains. Rudman (1998) for example, found that in general, female job applicants who demonstrated a masculine, self-promoting style were rated as less competent, less attractive and less hireable than male job applicants displaying the same style. Van Engen (1999) found that police officers rated a female police officer who used physical force when intervening in a brawl more negatively than a male officer displaying the same behavior.

Usually this type of research applies the so-called 'Goldberg-paradigm'. This paradigm refers to an experimental method used by Goldberg in 1968, which has become a very popular method for unobtrusively examining discrimination. In the initial experiment Goldberg gave respondents an article to evaluate. Half of the respondents were led to believe that the article was written by a woman and the other half that it was written by a man. Goldberg argued that sex discrimination was accountable for the more negative evaluation the article received when ostensibly written by a woman, as the devaluation could not be attributed to the quality of the article<sup>2</sup>. There have been several meta-analyses on research using the Goldberg-paradigm for studying sex differences in performance appraisals or the evaluation of job-candidates. Olian, Schwabb and Haberfeld (1988) and Davison and Burke (2000) reviewed research that used résumés of male and female (equated) hypothetical candidates. Olian and colleagues found that males were generally preferred over females in hiring recommendations, although this effect accounted for only 4% of the variance (in comparison, qualifications accounted for 35%). Davison and Burke showed that male candidates were favored over female candidates for masculine-typed jobs, and women for jobs that were feminine-typed. Bowen, Swim and Jacobs (2000) meta-analyzed field studies on performance evaluations of men and women in which the men and women were matched on a number of variables (e.g. organizational level, experience, education) and found a pro-male bias on masculine-typed performance measures and a pro-female bias on feminine-typed measures. In general, masculine-typed jobs have higher status (Maier, 1999), and masculine-typed performance measures are more relevant for progression in organizations and

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<sup>2</sup> Although this study has been one of the most cited studies demonstrating sex discrimination, replications of the experiment have been inconclusive. In a meta-analysis of replications of this study (119 studies reporting 575 comparisons) Swim, Borgida, Maruyama and Myers (1989) found that articles written by a woman on 'masculine' topics resulted in larger devaluation of the work of women.

careers (van Vianen, 1987). As a consequence, sex-segregation, and the lower status of women in the workplace may be perpetuated. Moreover, as gender roles act on people's ideals about men and women and about their ideal selves, and as they are reinforced by the consequences of adhering to gender roles, gender roles thus act as a means to reproduce or reinforce sex differences.

### *Gender Roles and Leader Roles*

Several authors (e.g. Burgess & Borgida, 1999; Deaux & Major, 1987; Eagly & Karau, 2001; Heilman, 1983; Nieva & Gutek, 1981; Schein, 1973, 1975, in press) have argued that bias or prejudice in the workplace arises from the inconsistencies people perceive between workplace roles and the attributes ascribed to an individual. Most workplace roles are characterized by agentic attributes and are therefore incongruent with the predominantly communal characteristics ascribed to women. The incongruence of the female gender role and workplace roles may lead to decreased performance expectations, increased expectations of failure, and decreased expectations of success for women. For example, in a laboratory study, Robbins and DeNisi (1993) found that in gender-role incongruent situations (men in secretarial jobs and women in carpenter jobs) the ratees received lower performance ratings than in gender-role congruent situations (women in secretarial jobs, men in carpenter jobs).

Especially leader roles and the female gender role have been found incompatible. When people are asked to describe the typical attributes of leaders, these attributes are surprisingly similar to those characteristics considered to be typical for men. In research investigating this relationship between sex role stereotypes and characteristics perceived to be necessary for management success, it has been shown repeatedly that people perceive successful leaders to be more similar to men than to women (Brenner, Tomkiewicz & Schein, 1989; Heilman, Block, Martell & Simon, 1989; Heilman, Block & Martell, 1995; Schein, 1973, 1975; Schein, Mueller & Jacobson, 1989). Although in more recent years female respondents tend to also attribute typical feminine characteristics to successful managers (Rojahn & Willemssen, 1994; Schein & Mueller, 1992; Schein, in press), in general, the adage is 'think manager, think male'. However, for women in the workplace, the female gender role that does not match that of a leader, remains an 'implicit background identity' (Ridgeway, 1997). Thus, gender roles *spill over* in the workplace (Nieva & Gutek, 1981). For male leaders their gender role and their leader role are similar, resulting in a double advantage. The fact that they are male and the fact that they are a leader both elicit expectations of agentic attributes.

Role congruity theory of prejudice against female managers (Eagly & Karau, 2001) posits that the incompatibility of leader roles and the female gender roles leads to two forms of prejudice: (a) perceiving women less favorably than men as potential occupants of leadership roles, and (b) evaluating behavior that fulfills the prescriptions of a leader role less favorably when it is enacted by a woman compared with a man. The first form of prejudice stems from the descriptive dissimilarity of gender roles and leader roles,



whereas the second form of prejudice is a result of the incompatible prescriptive nature of gender roles and leader roles. These two forms of prejudice will be discussed below.

### *Descriptive Nature of Gender Roles*

The first form of prejudice, the incongruity of the descriptive content of stereotypes of women with stereotypes of leaders, may lead people to think less favorably of women as potential occupants of leadership roles. Eagly and Karau (2001) discuss a wide range of attitudinal research (Gallup Polls (Gallup, 1953-1995); research on the Women as Manager Scale (Peters, Terborg & Taynor, 1974); survey research from the Harvard Business Review (Bowman, Worthy & Greyser, 1965; Sutton & Moore, 1985); and the U.S. General Social Survey (National Opinion Research Center, 1998) showing a general preference for male bosses over women as managers on questions such as 'if you were taking a new job and had your choice of a boss, would you prefer to work for a man or a woman?' (Gallup). Research on implicit attitudes<sup>3</sup> also showed that respondents had more negative attitudes towards female authority figures than towards male authority figures (Rudman & Kilianski, 2000).

Other evidence for a less favorable attitude towards female managers comes from experiments on hypothetical job candidates for managerial positions. Rudman and Glick (1999) for instance, investigated the hireability of videotaped applicants for a computer lab manager position. They manipulated the attributes of the applicants and the job. Candidates were described as agentic or communal and the position they applied for was either a 'feminized' or masculine managerial job. Overall, they found that female candidates were less likely to be hired than male candidates were. This effect was stronger for female agentic candidates that applied for a feminized managerial position. Communal candidates (regardless of sex or job description) invariably received low hiring ratings. Rudman and Glick argued that the female agentic applicants suffer a backlash effect when management jobs are feminized: to be serious contenders for a managerial job they need to be agentic, but by being agentic women violate female gender roles that are even more prescriptive when the managerial job is feminized.

Van Vianen (1987) studied 59 actual job interviews (21 women and 38 men) for 11 high status jobs at a university in the Netherlands. From the ideal qualities for the job, as described by the hiring committees, the masculine qualities were rated to be more important. Van Vianen found that the female candidates were rated as more feminine by the hiring committee than the candidates perceived themselves, whereas the perceptions of the male candidates and the committee coincided. The three women hired were rated by the committee to be more masculine compared to the unsuccessful candidates. There was no difference in masculinity between the hired (8) and the not-

<sup>3</sup> In contrast with explicit attitude measurement techniques in which raters are asked to give their opinion, implicit attitudes measurement techniques (Fazio, Jackson, Dunton & Williams, 1995; Greenwald, McGhee & Schwartz, 1998) use for instance response latencies to measure the strength of associations between pairs of concepts, for instance between 'female (male) leader' - 'good (bad)'.

hired men. Furthermore, the women were less satisfied with the job interview. Their claim, that they did not get enough opportunity to expose their expertise and experience, was corroborated by the significantly smaller proportion of time that was spent on professional qualities when the candidate was a woman compared to a man. The results suggest that the committee's perception of the female candidates was assimilated to the female gender role, which resulted in a perceived lack of fit to the work role.

Summarized, research on attitudes about female and male leaders suggest that the descriptive dissimilarity of female gender roles and leader roles leads to a shared notion that women are less suitable for managerial roles than men.

### *Prescriptive Nature of Gender Roles*

The second form of prejudice, the devaluation of behavior that fulfills the prescriptions of a leader role when enacted by a woman, originates from women's violation of prescriptive gender roles when they occupy leadership positions. Paradoxically, the enactment of gender role expectations may lead to decreased performance expectations, whereas fulfilling managerial role expectations may produce disadvantage for female leaders. A well-known court case (Hopkins versus Price Waterhouse) illustrates the latter. In 1982, Ann Hopkins was proposed for promotion to partner at Price Waterhouse, one of the USA's largest accounting firms, along with 88 male candidates. 'She had more billable hours than any other person proposed for partner that year, she had brought in business worth \$25 million, her clients praised her, and her supporters recommended her as driven, hard working, and exacting' (Fiske, Bersoff, Borgida, Deaux & Heilman, 1991, p. 1050). Instead of being promoted for her accomplishments, she was denied partnership because '(...) she had interpersonal skills problems. According to some evaluators, this 'lady partner candidate' was 'macho', she 'overcompensated for being a woman' and she needed a 'course at charm school' ' (Fiske et al., 1991, p. 1050). Although Hopkins may have effectively shown all the right behaviors that are required of a successful partner in this firm, exactly this behavior caused trouble as it violated gender role prescriptions. The fact that she was working in a male-dominated organization (7 out of 662 partners were female) may also have contributed to the derogatory evaluation of Hopkins. Fiske et al. succeeded in convincing the court that sex discrimination was at work here; their 'amicus curiae brief' helped Hopkins to win her case against Price Waterhouse.

A meta-analysis by Eagly, Makhijani, and Klonsky (1992) of 61 Goldberg-paradigm experiments on the evaluation of male and female managers, demonstrated that female managers are evaluated less favorably than male managers, although the difference in the evaluation of male and female managers was small (yet significant). The difference was more pronounced when the leadership style portrayed was more stereotypically masculine, particularly when this style was autocratic or directive. This type of leadership violates the prescriptive norms for the female gender roles more than the more stereotypically feminine typed leadership styles such as people-oriented leadership



and democratic leadership. Furthermore, Eagly, Makhijani and Klonsky (1992) found that the devaluation of female leaders compared to male leaders was stronger when leaders were portrayed in more male-dominated contexts, such as sports and male-dominated work groups, and when the evaluators were men.

One may argue that in Goldberg type studies where raters are presented with limited information, it is likely that raters make inferences based on general social categories such as sex, age or race. Stereotypical judgments, in the absence of individuating information, may be elicited by the laboratory situation. However, the results from a meta-analysis on the evaluation of actual managers in organizational settings are strikingly similar. Eagly, Karau and Makhijani (1995) compared the evaluation of male and female leaders of various organizations. Although they found no evidence for a overall devaluation of female managers, in the 96 studies, they did find that female leaders whose leader role was defined in more masculine terms, who worked in male-dominated settings (especially military settings), and who had numerically more male subordinates were evaluated less favorably than their male counterparts. In short, the magnitude of incongruity, and prejudice, may vary with (a) the particular leadership style that is used by a leader, and (b) the particular organizational context a leader is working in.

#### *Role-congruity: Style and Context*

Leadership styles have a gendered connotation that may be more or less incongruent with the female gender role. Cann and Siegfried (1990) studied the correspondence that people perceive between stereotypes of men and women and different types of leadership behaviours. They found that leadership styles that emphasize consideration with subordinates (people-orientated leadership) relate to stereotypes of women, whereas leadership styles that emphasise structuring (task-oriented leadership) relate to stereotypes of men. These less congruent styles can be expected to elicit more prejudiced reactions. As mentioned before, Eagly, Makhijani and Klonsky (1992) found that in studies in which female leaders were depicted as more democratic, interpersonally oriented female leaders were rated more positive and effective than women who were depicted as directive and task-oriented. In a direct test of the gender-role congruency hypothesis, Rojahn and Willemssen (1994) asked undergraduates to evaluate a narrated leader who was portrayed as either task-oriented or interpersonally oriented. As predicted, they found that gender-role congruent leaders were better evaluated than incongruent leaders, but only for male raters, and only on effectiveness ratings. Male raters devalued gender-role incongruent behavior by leaders, whereas female raters did not. On a different evaluative measure, likeability, male and female leaders were rated equally. However, the results of a study by Forsyth, Heiney and Wright (1997) were the other way around. Female task-oriented leaders were rated less likeable, but more effective than female relational oriented leaders by male and conservative raters (but not by raters that had liberal attitudes towards women as leaders and not by female raters). Besides the fact that the latter experiment only studied female leaders, the explanation for these con-

trasting findings may be in the definition of satisfaction and effectiveness, or in the items the researchers used for their dependent measures<sup>4</sup>.

On another dimension of leadership, the tendency to lead more autocratically or more democratically, Luthar (1996) found that autocratic female managers were evaluated better than autocratic male managers were. He argues that in some instances a gender contrast effect, instead of a gender discrimination effect may occur: '[autocratic] performance on the part of a female in a male domain may be overvalued due to the element of surprise.'(p.342). Furthermore, his data suggest that the contrast effect only occurred for the female raters. Female raters may hold their managers to a less strict adherence to gender roles than male subordinates do. Moreover, Luthar also found a 'similarity' effect, raters evaluated leaders of their own sex higher. That female raters in general rate female leaders better, even when their leaders show incongruent styles may be a result from the fact that female raters probably have more experience with female managers (Siltanen, 1989).

### *Variability in Leader Roles*

Although in general leader roles and the female gender role are considered incompatible there seems to be considerable variability in the amount of incongruence of gender roles and leader roles. The roles of a human resource manager, head nurse or manager of a day care center, for instance, are roles often enacted by women. Women may face less prejudice in these more 'feminine typed' contexts. The tasks that relate to these particular leader roles include 'taking care of others'. Besides the leader roles that have more feminine-typed task descriptions, some leader roles may be less incongruent with the female gender roles because the teams, organizations, or industries a leader is working in are numerically female-dominated. Thus, the context in which a leader works may influence whether a leader role is considered suitable for a (wo)man or not.

In her influential book 'Men and women of the corporation', Kanter (1977) suggested that structural features in the organization, such as skewed gender ratios, may actually be responsible for prejudice. According to Kanter, minorities, especially isolated individuals or 'tokens', face three perceptual processes that may work in their disadvantage. First, token managers have greater visibility, and so have their mistakes. High visibility may therefore lead to higher performance standards. Second, the distinctiveness, or 'otherness' of token managers is polarized, together with an exaggeration of the perceived similarity between the majority members. As a consequence token managers may face exclusion from informal networks, peer support and mentoring opportunities. And finally, the perception of token managers may be assimilated to

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<sup>4</sup> Forsyth and his colleagues measured effectiveness on three single items (satisfaction with, acceptance of, and effectiveness of a manager) which could also be called 'satisfaction'. They measured likeability on three single (the only one reported is 'easy to get along with'). Rojahn and Willemsen used a three-item scale for the effectiveness of the group rather than of the leader, and a three-item scale for likeability that could also be qualified as satisfaction with the leader. In this light, the studies are less inconsistent.



familiar stereotypes that do not match the work roles in an organization. In her book, Kanter argues that this token position of women in a large technical corporation results in fewer opportunities, less power and more stereotyping of women.

However, Ott (1985, 1989) found that in the nursing profession, in which men were the minority, men did not face a disadvantage, but rather an advantage. Ott compared male nurses and female police officers in teams in which they were a token or a minority. Although both the male nurses and the female police officers experienced more visibility, the results of this visibility differed dramatically. Female police officers more often felt excluded, were reminded of their 'otherness' in disturbing, harassing ways, which made them avoid informal happenings, and female officers were assigned to other (lower status) jobs than male officers. The male nurses, however, felt that they were in the center of attention, enjoyed the informal networks and felt that doctors, patients and colleagues gave them more opportunities and status than their female counterparts. Given these results, Ott argued that Kanter's token theory is not gender neutral and applies only to female tokens. Because of men's higher status in society, a token position of men and women differs dramatically.

A similar argument can be made for asymmetry in the prescriptiveness of gender stereotypes. Male violations of gender-roles do not lead to the same devaluation as women's violation of gender roles (Rudman, 1998; Rudman & Glick, 1999; Branscombe, Crosby & Weir, 1991; Van Engen, 1999). The boundaries of acceptable behavior by men seem less well-defined and broader than those of women.

### *Gender, Leadership Styles and Context*

Considering both normative and descriptive pressures to conform to gender stereotypes, one would expect that female managers lead in a more feminine fashion than their male counterparts. However, the empirical evidence for sex differences in leadership behavior is inconclusive. In fact, research has sometimes shown strong sex differences in the stereotypical direction (e.g. Jago & Vroom, 1982; Bass & Avolio, 1994), sometimes no evidence for sex differences in leadership behavior (e.g. Day & Stogdill, 1972; Komives, 1991b), or evidence for the opposite, i.e. counter-stereotypical, direction (e.g. Denmark & Diggory, 1966; Jensen, White & Singh, 1990). To accommodate for this 'now you see it, now you don't' pattern, which is typical for gender-related behaviors, Deaux and Major (1987) proposed an interaction-based model 'that captures both the stability and flexibility of sex differences in social behavior' (p369). The crux of this model is that behavior is seen as a result of ongoing interactions between perceivers and targets, negotiated by perceivers' expectancies, targets' identities and the context in which the behavior takes place. In this model, the context is proposed as an important moderator that guides the 'interaction-negotiated' behavior and can explain why certain context lead to sex differences in behavior while others do not.

A comprehensive meta-analytic study by Eagly and Johnson (1990) on 162 studies that appeared between 1961 and 1987 compared male and female managers on the

most widely used leadership styles people-oriented leadership, task-oriented leadership and democratic versus autocratic leadership. The meta-analysis demonstrated the moderating impact of the context. Eagly and Johnson reported that female managers are considerably more democratic than male managers. Women also tended to be slightly more interpersonal and task-oriented, but these differences were small and moderated by the study context. In organizational studies, in which the subjects were real leaders, sex differences were negligible. The difference between women and men was more pronounced, albeit still small, in assessment and most pronounced in laboratory studies, which often use students acting as leaders. Eagly and Johnson suggested that sex differences in organizations disappear because leaders are selected and select themselves on the same management qualities. In support of this argument is the finding that 'those few laboratory leaders who gained their position through emergence did not manifest the stereotypic styles of laboratory leaders who were appointed.' (p.247). Moreover, leaders in organizations usually take part in training programs, are part of networks, and have an organizational mentor and thus may become more alike as a result of this ongoing organizational socialization. Finally, most managerial jobs are well defined, and may leave limited scope for individual differences.

The contradictory findings of studies on sex differences in leadership behavior are partly explained by differences in the settings that researchers used to study differences. Descriptive and prescriptive pressures to act conform gender roles may be more present in both assessment settings and in laboratory settings. In assessment settings, leaders may be more occupied with impression management than with being a leader, as they are under close scrutiny to perform well. In laboratory settings, students, usually psychology students, in general do not have experience in managerial jobs, and may therefore resort to the (gender-role congruent) styles that lead to more positive evaluations. In support of this argument is a study by Korabik, Baril and Watson (1993). In a role playing experiment with management students acting as leaders, sex differences were found for male and female leaders without prior experience, but no differences were found between male and female experienced leaders. Similarly, Pratch and Jacobowitz (1996) found that the initial sex differences between male and female MBA student facilitators disappeared when they practiced their job for a longer period of time.

A second finding of the meta-analysis by Eagly and Johnson's (1990) is that the organizational context also explained variation in sex differences in leadership styles. In studies in which the percentage of male leaders was relatively high, female leaders were less democratic and less people-oriented. In studies in which the percentage of male subordinates was relatively high, male leaders were more task-oriented and more people-oriented. Strong arguments for the importance of the organizational context on leadership styles of male and female leaders were found in a study comparing male and female managers in male-dominated (e.g. the automotive industry, the timber industry, academia, consultancies, and accounting) and female-dominated industries (e.g. hair-dressing, nursing, and early childhood education) (Gardiner & Tiggemann, 1999). The



male and female managers within each industry (not between industries) were matched on status and nature of work. In both industries managers reported more people-oriented leadership than task-oriented leadership. However, the female managers were more people-oriented in female-dominated industries and more task-oriented in male-dominated industries. This suggests that female managers adapt themselves to the gender-typing of the organizational context more than their male counterparts.

Summarized, the literature provides no clear and simple answer to the question whether there are sex differences in leadership styles, or even whether such differences exist at all. The effect of the organizational context may explain contradictions in research findings. Sex differences in leadership style may be a consequence of the fact that (a) women more often lead teams of women whereas men more often lead teams of men, (b) women more often are leaders in feminine typed organizations and industries (e.g. the service industry) and men more often are leaders in masculine typed organizations and industries (e.g. technical and manufacturing industries), and (c) the management level of female managers is usually lower than that of male managers. Furthermore, the organizational context may have a differential effect on male and female leaders. Female managers may be more influenced by the organizational context than male leaders. More research is needed to unravel the intricate relation between sex of the manager and gender-typing of the organizational context.

### *Gender Identity*

The often quoted adage 'think manager, think male', that follows for instance from research by Schein and her colleagues (Schein, 1973, 1975; Schein et al., 1989), may actually misrepresent the findings. What is shown in these experiments is that people attribute the same characteristics to 'successful managers' as to 'men in general' and not to 'women in general'. Thus, what is measured is the *stereotypes* people have of characteristics of managers and of men and women. The adage may therefore be better represented by 'think manager, think masculine'. So far, we have looked at gender and (the evaluation of) leadership styles from a gender-role congruency perspective: somebody's biological sex elicits normative expectancies of masculine and feminine traits and behaviors that may work as self-fulfilling prophecies, reinforced by expectancy confirmation processes and thus lead to sex differences in leadership styles that conform to gender roles.

Nonetheless, one should be careful to avoid uni-dimensional conceptualizations of gender that put masculinity and male to one end of a continuum and femininity and female to the other end and thus create a 'separate spheres ideology' or biological essentialism. In earlier conceptualizations, masculinity and femininity were indeed seen as two opposite ends of a single continuum that could be mapped perfectly onto biological sex (e.g. Terman & Miles, 1936). Rationality for instance, was considered to be a masculine and male characteristic and irrationality, by definition, a feminine or female characteristic. As women were considered warm and sensitive, men, in this mutually

exclusive conceptualization, were considered insensitive and cold. On several grounds this conceptualization was criticized. First, the women's liberation movement rebelled against the 'feminine mystique' (Friedan, 1963; Smit, 1967) that was used as a legitimization to keep women in their places of homemakers and in jobs of lower power, prestige and income. Second, anthropological and historical research showed that gender roles were not universal across different cultures or times (Hunter College, 1983; Murdock & Provost, 1973; Oakley, 1972; Rubin, 1975) and claims of biological essentialism thus not unequivocally tenable. Finally, the psychological measurement of masculinity and femininity as a bipolar dimension has been criticized for different reasons (Constantinople, 1973). Items of some of the earlier scales were drawn from the researcher's common sense, and probably the researcher's personal normative expectancies (Burr, 1998). Other instruments (among which the MMPI) used biological sex to divide trait items in masculine and feminine. Interestingly, the latter procedure produced scales that bear little resemblance to what people generally think of as masculine or feminine (Burr, 1998).

In the 1970s Bem (1974), Broverman, Broverman, Clarkson, Rosenkrantz and Vogel (1970) and Spence, Helmreich and Stapp (1975) conceptualized masculinity and femininity as two independent dimensions and, more dramatically, both of these dimensions were conceptualized as not necessarily related to biological sex. Bem, and Spence and her colleagues, argued that men as well as women could have both masculine and feminine characteristics, or neither. From this research the concept of *gender identity* arose. Individuals who are high in masculinity and femininity became defined as persons with an 'androgynous' gender identity, individuals low in masculinity and low in femininity were referred to as 'undifferentiated', and individuals high on femininity but low on masculinity characteristics were typified as 'feminine', and those high on masculinity but low on femininity were typified as having a 'masculine' gender identity. Furthermore, an androgynous gender identity was considered to relate to mental health (Broverman et al., 1970), to self-esteem (Spence et al., 1975) and androgynous individuals were considered to be less inhibited in their range of behaviors (Bem, 1974) and demonstrate better performances in many areas (Cook, 1985).

Research has often indicated that gender identity is a better predictor of an individual's personality, attitudes and behavior than is biological sex (Cook, 1985). In the leadership domain, femininity is shown to relate to people-oriented leadership styles and masculinity to task-oriented leadership styles (Korabik, 1982; Korabik & Ayman, 1987). Several authors claim that androgynous managers are more effective because they combine both people-oriented and task-oriented leadership styles. Some of the research supported the superiority of the androgynous manager (Arkkelin & O'Connor, 1992; Korabik, 1990; Moss & Kent, 1994). Other research, however, found that masculinity alone is responsible for the superiority of the androgynous manager (Arkkelin & Simmons, 1985; Powell & Butterfield, 1979, 1984, 1989). Most research typically applied a similar experimental paradigm as used by Schein and her collaborates (Schein,



1973, 1975, Schein et al., 1989): people were asked to describe a 'good manager'. Research with actual managers (Wong, Kettlewell & Sproule, 1985; Baril, Elbert, Mahar-Potter & Reavy, 1989) demonstrated that masculine female managers fare better than feminine female managers. This result is surprising considered from the earlier described gender-congruency viewpoint. After all, evidence from role-congruity research demonstrates that people who violate prescriptive societal expectations of men and women are penalized. Surprisingly, people-oriented leadership styles are usually more effective than task-oriented styles (Haccoun, Haccoun & Sallay, 1978; Rosen & Jerdee, 1973) and it is femininity, not masculinity, which predicts people-oriented leadership. Apparently, the relation between gender-identity, leadership styles and the evaluation of managers is not so clear. This is one of the topics that will be explored further in this dissertation.

### *Overview of the Book*

The topic of gender and leadership, as outlined above, has elicited a large body of research over the last thirty years, but has left us with many questions, some of which are addressed in this book. As Butterfield and Grinnell (1999) noted in their review of gender and leadership: '(...) the meta-analytic studies by Eagly and her colleagues provide some encouragement insofar as the studies point out that the apparent inconsistency in results is actually somewhat orderly when contextual variables are taken into account'(p.237). In Chapter 2 of this dissertation, recent research on sex differences in leadership styles is reviewed. The main focus is on the different organizational settings that influence leadership styles of men and women. In addition to a small-scale meta-analysis of sex differences in leadership styles, a more in-depth discussion of individual studies aims to enrich the insight in the moderating effects of particular context factors.

What is clear from the theoretical framework expounded in this chapter and substantiated by the results of chapter 2 is that, 'context' itself has many facets. It can refer to broad general contexts such as type of industry, and type of organization or to the contextual characteristics of a certain management position, such as a leader's hierarchical level. It can also refer to the interpersonal context of a manager, such as the particular demographic composition of the workgroup and of the larger organization, to mention just a few. To complicate things even further, these facets are often intertwined and most of them implicitly relate to gender. Women are more often managers in smaller and female-dominated organizations or divisions of organizations, where they often have lower status positions and more often lead teams of female subordinates. More often than not, it is not clear which of the organizational contexts is at play.

The field study that is subsequently reported in this book aims at disentangling the knot of context variables thought to moderate sex differences in the evaluation and perception of leaders. This is done by examining an organizational context that is thought to be an important moderator of sex differences in the perception and evaluation of managers, i.e. the gender-typing of the immediate working context of a man-

ager, while controlling for other possible moderating organizational factors. The quasi-experimental design of the present study is accomplished in a natural way, by examining department managers of differently gender-typed departments in department stores deployed by a single retail organization. In Chapter 3, the design of the field study, the measurement instruments used and the statistical analyses used are discussed. A general outline and background information on the organization, the managers and their subordinates is presented. Within these department stores, the particular department a manager is leading, e.g., the ladies' clothes department, the furniture department, the electronic equipment department, is the key variable of interest. It is explained in this chapter how these departments can be ordered along a continuum ranging from 'typically feminine' to 'typically masculine'. Furthermore, the variables of interest, i.e. the leadership style instruments and the evaluation instruments, and their psychometric properties in the field experiment are introduced in this chapter.

In addition, part of Chapter 3 is dedicated to the explication of the statistical method used in the field study. Most quantitative organizational and social psychological research on groups uses data-analytic methods such as MAN(C)OVA or regression analyses. However, these widespread methods are often inadequate or even erroneous for research in groups that interact or share a common context. Hierarchical Linear Models or Multilevel Random Coefficient Models are the appropriate way of analyzing research in groups in which both individual level and group level variables are the variables of interest.

In Chapter 4, it is investigated whether the gender-typing of the organizational context influences the way shop assistants describe their male and female managers in terms of task-oriented, people-oriented, charismatic and empowering leadership styles. Moreover, it is studied whether these perceptions are more stereotypical for those shop assistants who have limited individuating information of their managers, compared to shop assistants who know their manager well. Finally, the relationship between leadership styles and perceived identity in terms of masculinity and femininity is explored.

Whether male and female managers are evaluated differently is the subject of Chapter 5. It is investigated whether managers in (a) more gender-role-congruent contexts, and managers who (b) show more gender-role congruent behavior, are evaluated more favorably. Furthermore, the relationship between gender-identity and the evaluation of managers is explored. The chapter consists of two parts. In the first part, the subordinate satisfaction with their manager is the main focus. In the second part the evaluation of the manager is studied by addressing performance measures of the manager's department, e.g. sales figures, service evaluation and sick-leave costs.

In conclusion, Chapter 6 summarizes the results of the meta-analysis and the field study and discusses practical and theoretical implications that follow from this work.



## Chapter 2

### Gender and Leadership Styles: A Review of the Nineties\*

\* An earlier version of this Chapter has appeared as:

Van Engen, M.L., & Willemssen, T.M. (2000). *Gender and leadership styles: A review of the past decade*. WORC-Paper 00.10-09. Tilburg University.

In this Chapter, empirical research that appeared between 1987 and 1999 in peer-reviewed journals on sex differences in leadership styles is reviewed by means of a meta-analysis, completed with narrative reviews of a selection of relevant studies. It is studied whether characteristics of the research report and characteristics of the organizational setting in which the research took place, moderate sex differences in leadership styles. The leadership styles that were examined were interpersonal leadership, task-oriented leadership, democratic versus autocratic leadership, transformational leadership and transactional leadership.

## 2.1. Introduction

Are women and men different leaders? This question has always been surrounded with much controversy. Generally, the positions that can be taken in this debate vary between two opposites: That they do, or that they do not. The position that men and women differ fundamentally in how they lead others is most prominent in popular management literature, i.e. books and magazines written primarily for practicing managers and the general public (e.g., Helgesen, 1990; Loden, 1985; Rosener, 1990). Some scholars who subscribe to this difference position claim that women have a different, 'female voice' (Gilligan, 1982) that has been overlooked by mainstream theory and research (e.g., Hare, 1996; Kibbe Reed, 1996; Perrault, 1996). On the other hand, a considerable portion of the social science literature favors the similarity position, claiming that, all things considered (or controlled for), men and women lead in similar ways (e.g., Dobbins & Platz, 1986; Klenke, 1993).

Empirical evidence for both positions accumulated through the years, contributing to the confusion in the field. In 1990, Eagly and Johnson published a meta-analysis on gendered differences in leadership styles, based on studies done between 1961 and 1987. Its major conclusion was that, in organizational studies, female and male leaders did not differ in interpersonally oriented style and task-oriented style. In two other types of studies, laboratory and assessment studies, men were found to be more task-oriented and women more interpersonally oriented. Also, women tended to adopt a more democratic or participative style and a less autocratic style than men in all three types of studies (Eagly and Johnson, 1990).

This chapter aims at reviewing the more recent empirical evidence on similarities and differences in women's and men's leadership styles to find out whether there is still such a mixture of sometimes contradictory results, or that perhaps more unity is emerging. In addition to the leadership styles studied by Eagly and Johnson (1990), today's most prominent leadership style in leadership theorizing, i.e., charismatic or transformational leadership (e.g. Bass & Avolio, 1994), is included in this review. In the present review possible factors that moderate the (magnitude of) sex differences are examined. The review provides a systematic quantitative integration, i.e. meta-analysis, of empirical articles that appeared in peer-reviewed journals, as well as a more in-depth discussion of those studies that specifically tested the moderating factors of interest.

First, the issues pertaining to studying sex differences in general will be addressed. Subsequently, the study of sex differences in leadership styles, its attractions and difficulties, is discussed in more detail. In the next paragraph empirical evidence from previous studies will be presented, to develop the hypotheses that will guide the research.

### *The Study of Sex Differences in Leadership*

In the research literature on sex differences in any trait, behavior, competence or skill, one usually can detect two competing streams of evidence: One minimizing or ignoring sex differences, the other maximizing or aiming to demonstrate differences. In feminist theory, this debate is known as the similarity-difference controversy (e.g., Bacchi, 1990; Scott, 1988). The 'similarity' tradition is based on the assumption of fundamental equality of the sexes and considers sex differences a consequence of a long history of unequal treatment. When women will have obtained equal rights, equal treatment and the same access to power as men, sex differences will disappear. The opposing 'difference' tradition celebrates women's essential difference from men in behavior, feelings and thought. Often, women's superiority is claimed, and consequently, for these theorist equality is too limited a goal. Social change can be reached by revaluing feminine characteristics.

This theoretical debate is reflected in the controversy about gendered management styles. Research by Schein and colleagues (Schein, 1973, 1975; Schein, Mueller, & Jacobson, 1989; Brenner, Tomkiewicz & Schein, 1989) has shown that in most countries characteristics of successful managers are perceived to be similar to characteristics of men, not women. During the 1970s, much of the literature was based on the similarity view and aimed at discrediting the stereotypical belief that women lack the necessary attributes to succeed in management (Wajcman, 1996). Recently, however, it is often predicted that women 'will make it to the top' because of their supposed different characteristics (e.g. Peters, 1990; Rosener, 1990). Supporters of the 'difference standpoint' claim, for instance, that women's leadership is based on previously unrecorded dimensions of leadership like spirituality (Hare, 1996); feeling (Fisher & Nelson, 1996); or care and friendship (Perrault, 1996).

Because one tradition has more to gain by finding differences and the other by refuting them, it is important to have a critical look at research on sex differences. How is it decided whether there is a difference or a similarity? Beneath the difference in empirical evidence showing either sex similarities or differences, there often are differences in methodology and data gathering. Three problems are typical of the literature on sex differences in leadership styles.

*All-female Studies.* Conclusions regarding women's special values, behavior and management style are often based on data from studies of only women. Mainstream leadership research has been concerned mainly with men leading other men (Nieva & Gutek, 1981). According to Denmark (1993), 'by ignoring gender as a variable in studies on leadership, researchers created many blanks in theoretical and research designs'



(p.345). In the last decades, however, women have entered the workforce in great numbers, slowly trickling into the management and executive layers. Simultaneously, studies on gendered organizations, on female leaders, and on women in management appeared, now forming a massive body of literature itself.

One of the earlier studies, by Apfelbaum and Hadley (1986), was based on interviews of fifteen leading women in France and the USA. These women stated that they did not use a similar style as their male colleagues. They described themselves as down-to-earth, result-minded, participatory and aware of personal values of subordinates, and good listeners, resulting at times in a maternal, momma-leadership style (p.215). Stanford, Oates & Flores (1995) interviewed twelve women who were selected because they appeared in newspapers. The women facilitated communication, were team builders, used referent or reward power, inspired, motivated, and fostered mutual trust and respect. Willemsen, Rojahn & Fischer (1993) concluded from a survey among 273 female readers of a Dutch glossy magazine 'Woman and Business' that women prefer a consulting leadership style. Similarly, Helgesen (1990) concluded from diary studies of four female leaders that their leadership style was participative, consensus building and empowering, leading to 'a web of inclusion' rather than men's hierarchical leadership. However, reactions from male managers stating that they - although being men - recognized their own experience in the leadership style described by Helgesen, necessitated an adjustment of the conclusions. In 1995, Helgesen stated that the 'web of inclusion' is not strictly reserved to women.

Usually, authors studying only women caution that they do not wish to make comparisons with men (as managers), but instead study women from a women's perspective, often focussing on the diversity among women (as leaders). Nevertheless, a conclusion of difference is hard to avoid and is often implicitly made.

*Strong Conclusions Based on Mixed Results.* What kinds of results are needed to be able to conclude that a sex difference in leadership style does exist? In general, the concept of style includes a variety of behaviors. What should the conclusion be if differences are found on some measures but not on others? Consider, for example, three studies reported in a paper by Bass, Avolio and Atwater (1996). Bass and Avolio also published the first study in 1994, under the title 'Shatter the glass ceiling: Women may make better managers'. Significant sex differences were found on all four transformational leadership scales and on two of the four transactional scales. In the second study, significant differences occurred only for half of the transformational and for one of the transactional scales. In the third study, only two out of seven sub-scales showed significant sex differences. Thus, the results were at least mixed. One could conclude that there are hardly any differences, or conclude what is implied in the title of the first study, an overwhelming difference.

*Confounding.* Sex is often confounded with other variables. Status (e.g. Doherty, 1997), hierarchical level in the organization (e.g. Denmark, 1993; Rinfret & Lortie-Lussier, 1997), organizational type (e.g. Gardiner & Tiggemann, 1999), and number



and characteristics of subordinates (e.g. Druskat, 1994; Lee, Smith & Cioci, 1993), are just some of the variables that are often correlated with manager's sex and might as well explain differences found between men and women. Detailed analyses should specify the impact of each of the confounding variables before it can be concluded that a difference is in essence sex based.

### *Leadership Styles*

Various classifications of leadership styles, the patterns of leadership behaviors, have been used in research. Lewin and Lippitt introduced the dimension of autocratic and democratic decision-making (also called directive versus participative or job-centered versus employee-centered leadership) in 1938. The dimension autocratic to democratic leadership ranges from the leader not allowing interference of subordinates in decision making and leading more autocratically, to the leader behaving more democratically and inviting subordinates to participate in the decision making. The dimension autocratic versus democratic leadership is considered to be a single bipolar dimension, i.e. a continuum. Acting democratically excludes being autocratic at the same time, but leaders may use both styles depending on the particular situational contingency of both the task structure and subordinate characteristics (e.g. Vroom & Yetton, 1973; Hersey & Blanchard, 1974). Sometimes another style, laissez-faire, is added, representing an avoidance of leader behavior (e.g. White and Lippitt, 1960).

The dichotomy task-oriented versus interpersonally oriented was introduced by Bales (1950) to describe the division of leadership tasks in small groups. Interpersonally oriented leadership includes behavior such as helping and doing favors for subordinates, looking out for their welfare, explaining procedures and being friendly and available. Task-oriented leadership consists of behavior such as having subordinates follow rules and procedures, maintaining high standards of performance and making leader and subordinates roles explicit. Some authors consider task-oriented and interpersonal oriented leadership as separate, relatively orthogonal dimensions (e.g. in the Leader Behavior Description Questionnaire by Halpin & Winer, 1957), whereas others consider these orientations as two ends of a single continuum (e.g. in the Least Preferred Co-Worker instrument by Fiedler, 1967).

The last decades there has been a flurry of research on a leadership style referred to by various scholars as visionary, charismatic, transformational, inspirational and post-heroic leadership (e.g. Conger & Kanungo, 1994; Den Hartog, van Muijen & Koopman, 1994). Sometimes charismatic leadership and transformational leadership are used as synonyms, but often charisma is considered a sub-dimension of transformational leadership, along with the sub-dimensions inspirational motivation, intellectual stimulation and individual consideration (Bass, Avolio & Atwater, 1996). Charismatic leaders are often described by the extraordinary impact they have on their followers: unquestioning obedience, loyalty and idolization. In this way, this leadership style is characterized by its effects and not by the leader's behavior. Some behavioral attributes of

charismatic leadership seem accepted as central to transformational leadership. According to Carless (1998), transformational leaders '(...) articulate a vision, use lateral or non-traditional thinking, encourage individual development, give regular feedback, use participative decision-making, and promote a cooperative and trusting work environment' (p.888). Transformational is often differentiated from transactional leadership. Transactional leadership comprises (a) contingent reward, negotiated agreements between leaders and followers about objectives and task requirements and suitable rewards; and (b) monitoring and correcting of, and intervening in, follower performance, called management-by-exception (Bass et. al., 1996). Both transformational and transactional leadership are thought to vary independently. Transformational and transactional leadership styles are often contrasted with the absence of leadership, *laissez-faire*, also mentioned earlier in the context of autocratic and democratic decision making (e.g. Bass & Avolio, 1994).

### *Gendered Leadership Styles*

The above mentioned modes of leadership styles either emphasize maintenance of tasks (e.g., autocratic, task-oriented, or transactional styles) or nurturing of interpersonal relationships (e.g., democratic, interpersonally oriented, or transformational styles). Therefore, they relate to gender because they reflect the femininity/masculinity dimensions of existing sex stereotypes. In general, the content of sex stereotypes is that men are considered instrumental, competent, rational and assertive (masculinity) and women sensitive, warm, tactful and expressive (femininity) (e.g. Broverman, Vogel, Broverman, Clarkson & Rosenkrantz, 1972; Deaux & Lewis, 1984; Williams & Best, 1990). Similarly, the interpersonal- and task-oriented styles closely match constructs like communion and agency (Bakan, 1966) or intimacy and independence (Tannen, 1990) which refer to respectively feminine and masculine modes of relating to others. The feminine modes are characterized by strivings for intimacy and union reflected in agreeable behaviors, whereas the masculine modes imply striving for mastery and dominance.

Cann and Siegfried (1990) assessed the correspondence between stereotypes of men and women and interpersonal- and task-oriented leadership behaviors in two studies. In the first study respondents rated sex-typed traits on a scale ranging from 'consideration' to 'structuring'. Masculine traits were considered consistent with structuring, whereas feminine characteristics were considered consistent with consideration. In the second study, descriptions of leader behaviors were rated on a scale ranging from masculine to feminine. Consideration behaviors were considered feminine, while structuring behaviors were considered masculine. Therefore, task-oriented leadership can be called a stereotypically masculine style and interpersonally oriented leadership a stereotypically feminine style.

Often, authors refer to transformational leadership as a feminine leadership style (e.g. Carless, 1998; Helgesen, 1990; Loden, 1985; Yammarino, Dubinsky, Comer & Jolson, 1997). Research by Hackman, Furniss, Hills and Paterson (1992), however,



indicated that transformational leadership is associated with both feminine and masculine characteristics, which suggests that transformational leadership is a stereotypically gender-balanced style.

Many authors refer to the more instrumental, task-oriented, autocratic styles explicitly as masculine leadership styles and to the interpersonally oriented, charismatic and democratic styles as feminine leadership styles. The terms 'stereotypically masculine styles' and 'stereotypically feminine styles' will be preferred in the present chapter. In this way it is clear that the dichotomies of leadership styles do not necessarily coincide with biological sex.

Due to the correspondence of the stereotypic gender dimensions and the leadership dimensions, many researchers assume, with or without empirical evidence, that there will be sex differences in the leadership styles they study and present explanations for these differences. In the next paragraphs empirical evidence for sex differences -or similarities -in leadership styles will be discussed. From this evidence the research questions and predictions are distilled that will form the focus of the review of recent empirical studies.

#### *Expectations from Empirical Evidence*

Eagly and Johnson (1990) present in their meta-analysis results based on various empirical studies. In the present study, two types of expectations of sex similarities or differences in leadership behavior will be based on these results. These concern the influence of study characteristics, i.e. the specific research context and methodological set-up of studies, and the influence of the organizational context in which managers lead, on the occurrence of sex differences in leadership behavior.

*Characteristics of the Study.* Overall, Eagly and Johnson (1990) found that women were more interpersonally oriented, more task-oriented and more interpersonally oriented on the bipolar interpersonal versus task-orient leadership style than men. However, the type of study qualified the effect. In organizational studies, differences were almost negligible. Sex differences were more pronounced, albeit still small, in assessment studies, and most pronounced in laboratory studies. In all types of studies sex differences in the democratic versus autocratic leadership dimension were found: women showed more democratic leadership than men. However, in most studies the democratic versus autocratic style measures were self-reports (18 out of 28 comparisons), which more often lead to stereotypic results than behavioral studies (3 out of 28) or reports from subordinates (4 out of 28 comparisons).

Eagly and Johnson (1990) explained the finding that sex differences in leadership styles in organizations are smaller than in laboratory studies by arguing that in organizational studies male and female managers are selected (and select themselves) on the same managerial criteria. In laboratory studies, findings are generally based on students, who may take their refuge in gender role behavior more easily than in leader role behavior, of which they have little or no experience. The same influence of study con-

text is expected in the empirical studies reviewed here, i.e., the prediction is that studies in organizational settings will show fewer sex differences than studies in laboratory settings or assessment studies (Prediction 1).

Another important factor in the occurrence of sex differences in leadership styles is the identity of the rater. The rater can be a researcher, using for example behavioral observation. Ratings can also be given by the leaders themselves, their supervisors, subordinates or colleagues, in interviews or questionnaires. Eagly and Johnson (1990) found a discrepancy between results from self-report studies and studies using subordinates as raters. Self-ratings were more stereotypic than subordinate ratings for the interpersonally oriented and the task-oriented styles, i.e., female leaders rated themselves more interpersonally and less task-oriented than subordinates did. For the autocratic-democratic dimension of leadership this influence of the rater could not be studied because most studies were based on self-ratings. Therefore, it is quite possible that the substantial sex difference on this dimension is confounded with the effect of the rater. However, in general one can expect that studies based on self-reports by leaders will show more stereotypical sex differences than those based on ratings by subordinates (Prediction 2).

*Organizational Context.* It seems logical to expect that the social setting of a leader, such as the hierarchical level, particular team, and type of organization, can influence the application of a particular leadership style. The present study concentrates on the question whether these structural features interact with a leader's sex. Three types of structural features will be studied: the organizational level, the sex ratios within an organization and the type of organization.

In their meta-analysis, Eagly and Johnson (1990) found that organizational level had little impact on the effect sizes of autocratic versus democratic, interpersonal versus task, and interpersonal styles. However, they did find a tendency for first-level male managers to be more task-oriented than women, and for mid-level female managers to be more task-oriented in comparison with men. Accordingly, it was expected that men and women hold positions of different power that are related to the leadership styles they apply, but that organizational level in itself does not have a different impact on the leadership styles of male and female managers (Prediction 3).

Kanter (1977) argued that women who have a token status in a predominantly male organization might be treated and perceived differently because of their visibility, and change their style accordingly. Eagly and Johnson (1990) indeed found that, to the extent that men predominated among the leaders whose style was assessed, the tendencies for women to be more interpersonal and more democratic weakened. The percentage of men among leaders' subordinates also related significantly to the effect sizes for some of the styles in the organizational sample. In an environment with larger proportions of male subordinates, male leaders were more task-oriented and less democratic than female leaders, but more interpersonally oriented on interpersonal versus task measures. It is therefore expected that the sex ratio of both the management layer and



the subordinate team moderate sex differences in leadership styles (Prediction 4).

In addition to these predictions, it will be explored whether sex differences or similarities in leadership styles are influenced by the type of organization in which leaders work.

*Changes in Sex Differences over Time.* In the meta-analysis of Johnson and Eagly (1990), the more recent studies (within the period from 1961 to 1987) of interpersonal- and task-oriented styles were more stereotypic. By contrast, studies of the democratic-autocratic dimensions and studies placing task-oriented and interpersonal oriented styles on a single dimension became less stereotypic in time.

In general, overviews of studies of sex differences in cognition demonstrate that these differences have become considerably smaller or have even vanished within the last 30 or 40 years (Feingold, 1988). On the other hand, sex stereotypes, which form an important factor in leadership behavior, are very persistent (Fiske and Stevens, 1993). Together with the mixed results of Eagly and Johnson (1990) this evidence makes us forbear from formulating an expectation on time dimensions.

The above predictions were tested using a meta-analytic technique to cumulate results across studies (see Hedges & Olkin, 1985; Johnson & Eagly, 1990). This synthesis of studies makes it possible to examine whether the organizational contexts and research characteristics which vary over studies moderate sex differences in leadership styles. Additional to the meta-analytic results, some of the studies that explicitly tested the predictions will be reviewed following each meta-analytic model.

## 2.2. Method

*Sample of Studies.* The present overview deals with studies reported in peer-reviewed journals from 1987 to 2000. Two sources were used to identify relevant articles, i.e., articles reporting on studies in which the leadership styles of men and women were compared. In PsycLit databases 1987-1999, searches were conducted using the keywords sex, gender, sex differences or gender differences, combined with leadership\*. This resulted in 482 hits. The Social Sciences Citation Index (SSCI) was used to track down articles referring to Eagly and Johnson's (1990) meta-analysis since the publication in 1990 unto and including December 1999, which resulted in 138 documents.

Criteria for including studies in the sample were that (a) the studies compared at least five male and five female leaders; (b) the leadership styles by the leaders were not equated or manipulated by the experimenter nor by training prior to measuring the leadership style; (c) one or more of the following leadership styles were measured: task-oriented leadership, interpersonal oriented leadership, task-versus-interpersonal oriented leadership (bipolar), democratic versus autocratic leadership (bipolar), and charismatic leadership or transformational leadership and transactional leadership. Studies on emergent leadership, effectiveness of leader behavior, evaluation of leader behavior, and studies that could not be placed on the leadership styles under study, such as 'conflict management styles' (e.g. Korabik, Baril, & Watson, 1993; Chusmir & Mills, 1989), 'influence styles' and 'power bases' (e.g. Lauterbach & Weiner, 1996; Ragins, 1989) or

performance feedback (e.g. Brewer, Socha & Potter, 1996) were excluded. The resulting sample (see Appendix 2.1) consisted of 26 studies reported in 20 documents.

*Coding of Studies.* Two coders independently coded the studies on the following variables: (a) type of leadership style (transformational; transactional; interpersonal-oriented; task-oriented; democratic-versus-autocratic<sup>1</sup>); (b) type of measurement instrument; (c) study setting (organizational; training/assessment; student simulation experiment; student non-simulation); (d) type of organizational setting (business; educational; governmental; miscellaneous); (e) organizational level (top; middle; low; miscellaneous<sup>2</sup>); (f) rater type (self; subordinate; supervisor; observation or conversation analysis); (g) student type (high-school; university; MBA); (h) sex-composition of the subordinates of a leader; (i) sex-composition among the leaders; (j) author sex composition and (k) date of publication. In addition, special features of individual articles that could not be included in the meta-analysis but were interesting for the review, (such as context effects; interactions between context and sex of the leader; confounding of individual leader variables with leader sex (e.g. tenure, education, age); and confounding of structural features with leader sex (e.g. hierarchical level, sex-composition of subordinates, type of leadership) were recorded for each study (see Appendix 2.1). Initial overall agreement was 86%, the average estimated inter-rater reliability was  $\kappa = .80$  (type of style  $\kappa = 1.00$ , type of instrument  $\kappa = 1.00$ , study setting  $\kappa = .68$ , organizational setting  $\kappa = .68$ , organizational level  $\kappa = .46$ , rater type  $\kappa = .92$ , student type  $\kappa = .67$ , sex-composition leader  $\kappa = .70$ , sex-composition subordinates  $\kappa = .86$ , sex-composition authors  $\kappa = .85$ , date of publication  $\kappa = 1.00$ ). Disagreements were resolved by discussion.

*Computation of effect sizes.* The effect size calculated for each comparison was  $g$ , the difference between the leadership style of men and women, divided by the pooled standard deviation (see Hedges & Olkin, 1985). A positive sign was given when male leaders used a style more and a negative sign when female leaders used a style more. If the data report was insufficient to calculate an effect size (e.g., the authors only mentioned that the difference was 'not significant', or that 'men/women used style significantly more'), the direction and reported (non)significance was recorded. To reduce computational error, the effect sizes were calculated independently by two coders with the aid of a special computer program (Johnson, 1989).

Most studies reported on more than one leadership style. Usually, a study uses one measurement instrument (e.g. the LBDQ, MLQ, and LPI) that consists of two (supposedly) orthogonal scales. Therefore the different scales were treated as separate comparisons, with one exception: Carless (1998) used three measurement instruments (MLQ,

<sup>1</sup> There were no interpersonal versus task-oriented scales in the present sample of studies.

<sup>2</sup> Some studies reported the percentages of managers in top and middle level, or between middle and lower level in their sample. In order not to lose this information, these studies were not coded as miscellaneous, but were given a weighted score that was between 1 (top) and 2 (middle), or between 2 and 3 (low).



LPI and GTL) for transformational leadership that proved to be correlated ( $r$  between .71 and .87,  $p < .05$ ). The correlation between the styles was used to combine the effect sizes to a single one with Rosenberg and Rubin's (1986) formula. When a study had multiple raters (e.g. supervisor, self, subordinate or observation), the effect sizes were used as separate comparisons, because the inspection of the effect sizes for different raters showed that type of rater yielded different results (Carless, 1998; Johnson, 1993; Komives, 1991a and 1991b; Lewis & Fagenson-Eland, 1998).

Computations were based on means and standard deviations, F or t tests, correlation coefficients, or p values. The most precise reported statistic was used, or the average of effect sizes calculated by different statistics. For multivariate designs that did not report univariate statistics on leader sex, the error term for leader sex was reconstituted by adding the between-groups sum of squares, except the one for sex, into the sums of squares (Johnson & Eagly, 2000). The gs were converted into ds by weighting each effect size by the reciprocal of its variance; a procedure that gives more weight to effect sizes that are more reliably estimated (Hedges & Olkin, 1985).

The 26 studies generated 16 effect sizes for interpersonal leadership, 14 for task-oriented leadership, 8 for democratic versus autocratic, 12 for transformational leadership and 7 for transactional leadership. In total there were 57 effect sizes (and 8 additional comparisons for which no effect size could be calculated but which could be included in a 'sign test'). For reports on all comparisons together, the signs for interpersonal leadership, transformational leadership and democratic versus autocratic leadership were changed: In this way, all the comparisons are in stereotypical direction, a positive sign indicating that effect sizes are in the stereotypical direction (men use task-oriented and transactional styles more, women use interpersonal oriented, transformational, and democratic leadership more), a negative sign indicating that the effect sizes are in a counter-stereotypical direction.

Furthermore, the proportion of differences in the stereotypic direction, whether significant or not, was determined to be able to calculate the sign test (*proportion stereotypic*).

*Analyses.* To determine whether the effect sizes in this sample were homogeneous, i.e. were constant across studies, a homogeneity statistic ( $Q$ ) was used, which has an approximate Chi-square distribution with  $k - 1$  degrees of freedom, where  $k$  is the number of effect sizes (Hedges & Olkin, 1985, Johnson & Eagly, 2000). In the absence of homogeneity, outliers were deleted stepwise until homogeneity was reached. Hedges (1987) found that for meta-analyses on psychological topics the removal of 20% usually results in homogeneity. In the present study 16% removal of comparisons resulted in homogeneity for the overall comparisons. Of the separate styles, interpersonal oriented leadership and democratic versus autocratic leadership were homogeneous, for transformational leadership to become homogeneous 25% of the cases needed to be removed, for transactional leadership this was 14% and for task-oriented leadership this was 36%. The outliers were investigated to decide whether or not to include them in further model testing. *Stem and leaf plots* and *expected values-observed values plots* were exam-



ined to assure that the effect sizes were normally distributed. *Funnel plots* were examined for a possible publication bias (Johnson & Eagly, 2000). There was no evidence for a publication bias and the effect sizes were normally distributed.

Categorical models and continuous models were estimated to explain the heterogeneity of the effect sizes. The impact of the study setting, organizational sector, rater type, and hierarchical level were tested with categorical models. For continuous variables (sex-compositions and publication date) regression models were estimated. Categorical models provide a between-classes effect ( $Q_b$ ) (comparable to a main effect in MANOVA) and a test of the homogeneity of the effect sizes within each class ( $Q_w$ ).  $Q_b$  and  $Q_w$  have an approximate Chi-square distribution with  $p - 1$  degrees of freedom, in which  $p$  is the total number of comparisons for  $Q_b$ , and the number of comparisons within each class for  $Q_w$ . In the Tables the mean  $d$  for each class is given, together with an indication that this mean differs significantly from 0.00. For continuous models simple linear regression models were used. In the Tables the beta-weights and unstandardized B's are reported.

*Narrative review.* Additional to the meta-analysis, a review will be presented of those documents that are relevant for the predictions under study, both to illustrate the findings and to include relevant information that cannot be included in the meta-analysis. As the sample used in the meta-analysis consists of a heterogeneous set of new studies, each study presents a unique combination of moderating variables. Some articles report on a confounding of important factors with sex of the leader, but the data were not sufficient to include these confounding factors as moderators in the meta-analysis. Furthermore, narrative reviewing of relevant articles makes it possible to locate interaction effects between the main variable of study, i.e. leader's sex, and other variables, such as the organizational context, sex-compositions and subordinate sex. Moreover, this approach gives more insight to the impact that certain variables may have on both men and women. Men and women may, for instance, use people-oriented leadership more than task-oriented leadership, which stays concealed in a meta-analysis on sex differences. However, for the topic of gender and leadership it is important to consider whether men and women have similar preferences for a feminine or masculine leadership style.

## 2.3. Results and Discussion

### *Study Characteristics*

Table 2.1 summarizes the main characteristics of the studies included in the meta-analysis. For detailed characteristics on the individual studies the reader is referred to Appendix 2.1. Studies were in general (a) published in 1995, (b) more often in organizational settings than in assessment, laboratory, or student-paper-and-pencil settings. The leaders in the organizations came from (c) a variety of organizational settings and (d) various organizational levels. The leaders (e) were rated most frequently by them-

Table 2.1

*Summary of Study Characteristics of Research on Gender and Leadership Styles 1987-1999.*

|                              | All<br>Comparisons<br>(n=65) | Transformational<br>style<br>comparisons<br>(n=13) | Transactional<br>style<br>comparisons<br>(n=8) | Interpersonal<br>style<br>comparisons<br>(n=18) | Task-style<br>comparisons<br>(n=18) | Democratic vs.<br>autocratic style<br>comparisons<br>(n=8) |
|------------------------------|------------------------------|--|--|---|-------------------------------------|--|
| Publication date (median)    | 1995                         | 1996   | 1996   | 1995  | 1995                                | 1995   |
| Study setting                |                              |  |  |   |                                     |  |
| Organizational               | 44                           | 11   | 6  | 11  | 11                                  | 5  |
| Training/assessment          | 5                            | 1  | 1  | 1   | 1                                   | 1  |
| Student-simulation           | 10                           |  |  | 4   | 4                                   | 2  |
| Student-nonsimulation        | 6                            | 1  | 1  | 2   | 2                                   |  |
| Organizational setting       |                              |  |  |   |                                     |  |
| Educational                  | 13                           | 5  | 3  | 2   | 2                                   | 1  |
| Governmental                 | 9                            |  |  | 4   | 4                                   | 1  |
| Business                     | 5                            | 4  | 1  |   |                                     |  |
| Miscellaneous                | 22                           | 3  | 3  | 6   | 6                                   | 4  |
| Organizational level         |                              |  |  |   |                                     |  |
| Top-middle                   | 5                            |  |  | 2   | 2                                   | 1  |
| Middle                       | 7                            | 3  | 2  | 1   | 1                                   |  |
| Middle-low                   | 7                            | 3  |  | 2   | 2                                   |  |
| Low                          | 11                           | 3  | 3  | 2   | 2                                   | 1  |
| Mixed                        | 19                           | 3  | 2  | 5   | 5                                   | 4  |
| Rater                        |                              |  |  |   |                                     |  |
| Subordinate                  | 20                           | 10   | 7  | 2   | 1                                   |  |
| Self                         | 36                           | 2  | 1  | 13  | 13                                  | 7  |
| Supervisor                   | 3                            | 1  |  | 1   | 1                                   |  |
| Observation                  | 6                            |  |  | 2   | 3                                   | 1  |
| Student type                 |                              |  |  |   |                                     |  |
| Highschool                   | 2                            |  |  | 1   | 1                                   |  |
| University                   | 13                           | 1  | 1  | 5   | 5                                   | 1  |
| MBA                          | 3                            |  |  | 1   | 1                                   | 1  |
| Sex-composition <sup>a</sup> |                              |  |  |   |                                     |  |
| Leaders                      | .60 (37)                     | .65 (11)   | .53 (6)  | .59 (8)   | .59 (8)                             | .55 (4)  |
| Subordinates                 | .44 (22)                     | .43 (10)   | .44 (5)  | .44 (3)   | .44 (3)                             | .44 (1)  |

*Note.* <sup>a</sup> Proportion of men, between parentheses is the number of comparisons that allowed sex-composition to be calculated.

selves or by their subordinates. When students were the raters, they more often were (f) university students. Finally, the proportion of men among the leaders was in general .60, whereas the proportion of men among the subordinates was in general .44.

### *Preliminary Analyses of Sex Differences in Leadership Styles*

Below, the results per leadership style will be reported first. Effect sizes of the styles, outlier analysis and the proportion of stereotypic findings will be discussed for each style. Furthermore, it is explained why certain outliers will be removed from subsequent analyses. Next, the analysis on all comparisons is discussed. Table 2.2 presents the results of the analyses after removal of the outliers that were excluded from further analyses. Following Cohen (1969), effect sizes are considered small between .00 and .20, moderate between .20 and .50 and effect sizes greater than .50 are relatively large<sup>3</sup>.

*Interpersonal-oriented leadership.* The mean effect sizes for interpersonal-oriented did not differ significantly from 0, although the effect size for interpersonal-oriented leadership was in the stereotypical direction (known effect sizes  $d = -.13$ , all reports  $d = -.15$ ). The sign test was significant and showed that the majority of studies was in stereotypical direction (proportion stereotypic = .76,  $p < .05$ ). The homogeneity test was not significant, which implies that the results, i.e. overall no indication for sex differences in interpersonal leadership, are homogeneous in this sample.

*Task-oriented leadership.* The mean effect size for task-oriented leadership was not significant ( $d = -.01$  for known effect sizes and  $d = -.05$  for all reports). The studies measuring task-oriented leadership were heterogeneous. Removal of outliers changed the sign of the effect size ( $d = .32$ )<sup>4</sup>. The proportion stereotypic (.44) was not significant ( $p < .82$ ).

*Democratic-versus-autocratic leadership.* There were only 8 comparisons on democratic versus autocratic leadership. The mean weighted effect size,  $d = -.19$ , was in the predicted direction (all reports  $d = -.18$ ). The proportion stereotypic was not significant (.75,  $p < .29$ ), but in the predicted direction.

*Transformational leadership.* Results for transformational leadership showed that female leaders use this style more, although the magnitude of the effect size was small. The effect size was significant ( $d = -.19$ ,  $n = 12$ ), also after removal of outliers ( $d = -.17$ )<sup>5</sup>, although when all reports were included the mean effect size just lost significance

<sup>3</sup> The magnitude of effect sizes can also be interpreted in terms of 'variability explained' (see Johnson & Eagly, 1990, p.520). Effect sizes of .20, .50 and .80 explain 1, 9 and 25 percent of the variance, respectively.

<sup>4</sup> Outliers were (stepwise) Dhillon & Nagrath (1988); Gardiner & Tiggmann, male-dominated industry (1999); Dhillon (1989); Gardiner & Tiggemann, female-dominated industry (1999); Pratch & Jacobowitz (1996). Inspection of the funnel plot, the stem and leaf plot and the expected values-observed values plot showed that task-oriented leadership was normally distributed and the outliers fitted in this distribution.

<sup>5</sup> Outliers were (stepwise) Druskat (1994); Komives (1991b); Lee, Smith & Cioci (1993). Inspection of the funnel plot, the stem and leaf plot and the expected values-observed values plot showed that transformational leadership was normally distributed and the outliers fitted in this distribution.



Table 2.2.  
Summary of Sex Differences in Leadership Styles

| Criterion                             | Interpersonal style comparisons | Task style comparisons | Democratic vs autocratic style comparisons <sup>a</sup> | Transformational style comparisons | Transactional style comparisons | All comparisons <sup>b</sup> |
|---------------------------------------|---------------------------------|------------------------|---|------------------------------------|---------------------------------|------------------------------|
| Known effect sizes                    |                                 |                        |   |                                    |                                 |                              |
| Sample size ( <i>n</i> )              | 16                              | 14                     | 8   | 11                                 | 6                               | 55                           |
| Mean weighted <i>d</i>                | -.13                            | -.01                   | -.19  | -.10                               | +.06                            | +.09                         |
| 95% C.I. for <i>d</i>                 | -.24/+.02                       | -.13/+.10              | -.37/-.00 <sup>c</sup>                                  | -.15/-.05                          | -.02/+.13                       | +.05/+.12                    |
| Homogeneity ( <i>Q</i> )              | 21.27                           | 80.49 ***              | 4.07  | 25.31**                            | 7.45                            | 144.14***                    |
| Known effect sizes excluding outliers |                                 |                        |   |                                    |                                 |                              |
| Sample size ( <i>n</i> )              |                                 | 9                      |   | 9                                  |                                 | 48                           |
| N removed outliers                    |                                 | 5 (36%)                |   | 2 (18%)                            |                                 | 7 (13%)                      |
| Mean weighted <i>d</i>                |                                 | +.32                   |   | -.17                               |                                 | +.09                         |
| 95% C.I. for <i>d</i>                 |                                 | +.15/+.48              |   | -.24/-.11                          |                                 | +.06/+.13                    |
| Homogeneity ( <i>Q</i> )              |                                 | 12.95                  |   | 14.85 <sup>#</sup>                 |                                 | 62.38                        |
| All reports                           |                                 |                        |   |                                    |                                 |                              |
| Sample size ( <i>n</i> )              | 18                              | 18                     | 8   | 21                                 | 7                               | 63                           |
| Mean unweighted <i>d</i>              | -.15                            | -.05                   | -.18  | -.12                               | +.11                            | +.09                         |
| 95% C.I. for mean unweighted <i>d</i> | -.36/+.05                       | -.40/+.29              | -.35/-.02   | -.26/+.03                          | -.04/+.25                       | -.03/+.20                    |
| Stereotypic differences               | .76 <sup>c</sup> (17)           | .44 (18)               | .75 (8)   | .82 <sup>#</sup> (11)              | .67 (6)                         | .67* (60)                    |

Note. \*\*\*  $p < .001$ , \*\*  $p < .01$ , \*  $p < .05$ , #  $p < .10$ . Effect sizes for individual styles are in positive direction if men use style more, or in negative direction if women use style more. Effect sizes for all comparisons are positive when in stereotypical direction and negative when in counter-stereotypical direction. *D* = effect size, C.I. = confidence interval, *Q* = homogeneity of effect sizes.

<sup>a</sup> Positive direction means more democratic, <sup>b</sup> excluding Druskat (1994), <sup>c</sup> upper bound C.I. = -.0022.

( $d = -.13$ ). The largest outlier was the study by Druskat (1994). In this study members of catholic convents rated their leader. This meant that nuns rated female leaders and priests and brothers rated male leaders. Thus, sex of the rater and sex of the leader are perfectly confounded. The fact that female leaders in this study were more transformational than male leaders may be entirely due to the sex of the rater, or to the different setting of a male or female convent. In further analyses this study is therefore excluded. In Table 2.2, the analysis on transformational leadership is reported after Druskat's (1994) study is omitted. As can be seen, the mean weighted  $d$  is somewhat smaller, but still significant. The proportion stereotypic was high, indicating that 82 percent of the comparisons was in stereotypical direction, but only marginally significant ( $.82, p < .07$ ).

*Transactional leadership.* Although the analysis of the known effect sizes showed a moderate effect that male leaders are more transactional ( $d = .22, n = 7$ ), removing outliers and including all reports resulted in non-significant effect sizes ( $d = .06, n = 6$ ; and  $d = .13, n = 8$ ). The only outlier was again Druskat's (1994) study on priests and nuns in convents. After removal of this study, the mean weighted and mean unweighted  $d$  decreased and lost significance (see Table 2.2). The proportion stereotypic was not significant (67%,  $p < .69$ ).

*All comparisons.* Overall, effect sizes were in stereotypic direction (mean weighted  $d = .09$ ), which was significant, even after removing outliers<sup>6</sup> ( $d = .09$ ). However, when all reports were considered, i.e. including those studies that did not permit effect sizes to be calculated, the overall unweighted mean  $d$  lost significance (.09). However, considering the large proportion of studies that was in the stereotypic direction (.67,  $p < .02$ ) in general, the results confirm that male and female managers lead in gender-role congruent ways.

### *Categorical Models*

Categorical models for all comparisons on the moderating influence of study setting, organizational setting, organizational level and rater type are presented in Table 2.3. Additionally, categorical models were run for all leadership styles separately, even when the preliminary analyses showed that the mean effect sizes were not heterogeneous. First, the homogeneity may have also been a result of the small number of effect sizes. Second, the main interest was in the moderating influence of context, setting and rater. Some of the estimated models were significant despite the homogeneity of the mean effect size, which justifies testing these models. Significant models of individual leadership styles are reported in the text. The estimated categorical models for the different leadership styles are presented in Table 2.3.

<sup>6</sup> The study by (Druskat, 1994) was removed from this analysis. Outliers were the task-oriented comparisons of Dhillon (1989), Dhillon and Nagraath (1988), Gardiner and Tiggemann –male-dominated (1999), Komives (1991a), Lewis and Fagenson-Eland: self-ratings (1998) and Pratch & Jacobowitz (1996), and the interpersonal oriented comparison in female-dominated industries of Gardiner and Tiggemann (1999). Inspection of the outliers suggests that results for task-oriented leadership comparisons may differ from the other leadership comparisons.

Table 2.3  
Categorical Models for Predicting Sex Differences

| Type of study                              | All comparisons |                   |                         | Interpersonal style comparisons |                   |                      | Task style comparisons |                    |                         | Democratic vs. autocratic style comparisons <sup>a</sup> |                   |                      | Transformational style comparisons |                   |                      | Transactional style comparisons |                   |                      |
|--|-----------------|-------------------|-------------------------|---------------------------------|-------------------|----------------------|------------------------|--------------------|-------------------------|--|-------------------|----------------------|------------------------------------|-------------------|----------------------|---------------------------------|-------------------|----------------------|
|  | <i>n</i>        | <i>d</i>          | <i>Q<sub>w</sub></i>    | <i>n</i>                        | <i>d</i>          | <i>Q<sub>w</sub></i> | <i>n</i>               | <i>d</i>           | <i>Q<sub>w</sub></i>    | <i>n</i>   | <i>d</i>          | <i>Q<sub>w</sub></i> | <i>n</i>                           | <i>d</i>          | <i>Q<sub>w</sub></i> | <i>n</i>                        | <i>d</i>          | <i>Q<sub>w</sub></i> |
| Study setting                              |                 |                   |                         |                                 |                   |                      |                        |                    |                         |  |                   |                      |                                    |                   |                      |                                 |                   |                      |
| <i>d<sub>overall</sub> (Q<sub>b</sub>)</i> |                 | +.09 <sup>♦</sup> | (31.92 <sup>***</sup> ) |                                 | -.13 <sup>♦</sup> | (6.74 <sup>†</sup> ) |                        | -.01               | (31.92 <sup>***</sup> ) |  | -.19 <sup>♦</sup> | (7.74)               |                                    | -.10 <sup>♦</sup> | (.24 <sup>†</sup> )  |                                 | +.06              | (4.01 <sup>†</sup> ) |
| Organizational                             | 40              | +.12 <sup>♦</sup> | 85.07 <sup>***</sup>    | 10                              | -.22 <sup>♦</sup> | 11.97                | 10                     | +.25 <sup>♦</sup>  | 35.51 <sup>***</sup>    | 5  | -.18              | 3.96                 | 10                                 | -.11 <sup>♦</sup> | 25.07 <sup>**</sup>  | 5                               | +.11 <sup>♦</sup> | 3.44                 |
| Training/assessment                        | 5               | +.01              | 2.76                    | 1                               | +.08              | -                    | 1                      | -.12               | -                       | 1  | -.26              | -                    | 1                                  | -.07              | -                    | 1                               | -.05              | -                    |
| Student-simulation                         | 6               | +.24 <sup>♦</sup> | 1.48                    | 3                               | -.33              | .98                  | 1                      | +.18               | -                       | 2  | -.17              | .03                  |                                    |                   |                      |                                 |                   |                      |
| Student-nonsimulation                      | 4               | -.25 <sup>♦</sup> | 22.90 <sup>***</sup>    | 2                               | +.06              | 1.58                 | 2                      | -.46 <sup>†</sup>  | 13.06 <sup>**</sup>     |  |                   |                      |                                    |                   |                      |                                 |                   |                      |
| Organizational setting                     |                 |                   |                         |                                 |                   |                      |                        |                    |                         |  |                   |                      |                                    |                   |                      |                                 |                   |                      |
| <i>d<sub>overall</sub> (Q<sub>b</sub>)</i> |                 | +.11              | (7.47 <sup>†</sup> )    |                                 | -.21 <sup>♦</sup> | (2.67)               |                        | +.23 <sup>♦</sup>  | (15.90 <sup>***</sup> ) |  | -.19              | (3.18)               |                                    | -.10 <sup>♦</sup> | (6.96 <sup>†</sup> ) |                                 | +.06              | (6.04 <sup>†</sup> ) |
| Educational                                | 13              | +.10 <sup>♦</sup> | 41.81 <sup>***</sup>    | 2                               | -.36              | 3.68                 | 2                      | +.83 <sup>♦</sup>  | .80                     | 1  | -.56 <sup>♦</sup> | -                    | 5                                  | -.06              | 14.10 <sup>*</sup>   | 3                               | +.15 <sup>♦</sup> | 1.40                 |
| Governmental                               | 7               | +.19 <sup>♦</sup> | 9.75                    | 3                               | -.06              | .93                  | 3                      | +.32 <sup>♦</sup>  | 6.48 <sup>†</sup>       | 1  | -.20              | -                    |                                    |                   |                      |                                 |                   |                      |
| Business                                   | 5               | +.18 <sup>♦</sup> | 4.59                    |                                 |                   |                      |                        |                    |                         |  |                   |                      | 4                                  | -.21 <sup>♦</sup> | 3.52                 | 1                               | +.12              | -                    |
| Miscellaneous                              | 20              | +.05 <sup>♦</sup> | 29.83 <sup>†</sup>      | 6                               | -.28 <sup>♦</sup> | 5.65                 | 6                      | -.04               | 13.82 <sup>†</sup>      | 4  | -.07              | .84                  | 2                                  | -.10              | .73                  | 2                               | -.05              | .00 <sup>b</sup>     |
| Hierarchical level                         |                 |                   |                         |                                 |                   |                      |                        |                    |                         |  |                   |                      |                                    |                   |                      |                                 |                   |                      |
| <i>d<sub>overall</sub> (Q<sub>b</sub>)</i> |                 | +.11 <sup>♦</sup> | (6.20)                  |                                 | -.21 <sup>♦</sup> | (7.54)               |                        | +.23 <sup>♦</sup>  | (29.47 <sup>***</sup> ) |  | -.19              | (3.18)               |                                    | -.10 <sup>♦</sup> | (9.09 <sup>†</sup> ) |                                 | +.06              | (1.98)               |
| Top-middle                                 | 5               | -.08              | 9.17                    | 2                               | -.23              | .15                  | 2                      | -.52 <sup>♦</sup>  | 1.08                    | 1  | -.20              | -                    |                                    |                   |                      |                                 |                   |                      |
| Middle                                     | 5               | +.08 <sup>♦</sup> | 13.54 <sup>†</sup>      | 1                               | -.78 <sup>♦</sup> | -                    | 1                      | -.31               | -                       |  |                   |                      | 2                                  | -.07              | 3.09                 | 1                               | +.31              | -                    |
| Middle-low                                 | 7               | +.21 <sup>♦</sup> | 10.88                   | 2                               | -.01              | .05                  | 2                      | +.42 <sup>♦</sup>  | 2.39                    |  |                   |                      | 3                                  | -.21 <sup>♦</sup> | 3.52                 |                                 |                   |                      |
| Low  | 11              | +.10 <sup>♦</sup> | 35.87 <sup>***</sup>    | 2                               | -.36              | 3.68                 | 2                      | +.83 <sup>♦</sup>  | .80                     | 1  | -.56 <sup>♦</sup> | -                    | 3                                  | +.03              | 5.91                 | 3                               | +.08              | 2.22                 |
| Mixed                                      | 17              | +.11 <sup>♦</sup> | 17.79                   | 4                               | -.18              | 1.51                 | 4                      | +.22               | 3.26                    | 4  | -.07              | .84                  | 3                                  | -.16 <sup>♦</sup> | 3.70                 | 2                               | +.03              | 3.24                 |
| Rater type                                 |                 |                   |                         |                                 |                   |                      |                        |                    |                         |  |                   |                      |                                    |                   |                      |                                 |                   |                      |
| <i>d<sub>overall</sub> (Q<sub>b</sub>)</i> |                 | +.09 <sup>♦</sup> | (2.39)                  |                                 | -.13 <sup>♦</sup> | (2.14)               |                        | -.01               | (2.28)                  |  | -.19 <sup>♦</sup> | (.01)                |                                    | -.10 <sup>♦</sup> | (3.51)               |                                 | +.06              | (1.27)               |
| Subordinate                                | 14              | +.08 <sup>♦</sup> | 23.75 <sup>†</sup>      | 1                               | -.51              | -                    |                        |                    |                         |  |                   |                      | 8                                  | -.09 <sup>♦</sup> | 14.95 <sup>†</sup>   | 5                               | +.05              | 6.18                 |
| Self                                       | 35              | +.09 <sup>♦</sup> | 115.67 <sup>***</sup>   | 13                              | -.14 <sup>♦</sup> | 19.13                | 12                     | -.05               | 78.21 <sup>***</sup>    | 7  | -.18              | 4.05                 | 2                                  | -.16              | 6.84 <sup>†</sup>    | 1                               | +.32              | -                    |
| Supervisor                                 | 3               | +.21 <sup>♦</sup> | 2.25                    | 1                               | +.02              | -                    | 1                      | +.22               | -                       |  |                   |                      | 1                                  | -.31 <sup>♦</sup> | -                    |                                 |                   |                      |
| Observation                                | 3               | +.16              | .09                     | 1                               | -.09              | -                    | 1                      | +.18               | -                       | 1  | -.22              | -                    |                                    |                   |                      |                                 |                   |                      |
| Student type                               |                 |                   |                         |                                 |                   |                      |                        |                    |                         |  |                   |                      |                                    |                   |                      |                                 |                   |                      |
| <i>d<sub>overall</sub> (Q<sub>b</sub>)</i> |                 | -.05              | (16.74 <sup>***</sup> ) |                                 | -.09              | (6.09 <sup>*</sup> ) |                        | -.29 <sup>♦</sup>  | (24.85 <sup>***</sup> ) |  | -.17              | (3.23)               |                                    |                   |                      |                                 |                   |                      |
| Highschool                                 | 2               | -.09              | 2.05                    | 1                               | -.03              | -                    | 1                      | -.21               | -                       |  |                   |                      |                                    |                   |                      |                                 |                   |                      |
| University                                 | 7               | -.22 <sup>♦</sup> | 32.34 <sup>***</sup>    | 4                               | -.03              | 6.05                 | 2                      | -.71 <sup>♦</sup>  | 10.41 <sup>**</sup>     | 1  | -.22              | -                    |                                    |                   |                      |                                 |                   |                      |
| MBA  | 3               | +.49 <sup>♦</sup> | 7.31 <sup>†</sup>       | 1                               | -.85 <sup>♦</sup> | -                    | 1                      | +.106 <sup>†</sup> | -                       | 1  | -.15              | -                    |                                    |                   |                      |                                 |                   |                      |

Note. \*\*\**p* < .001, \*\**p* < .01, \**p* < .05, <sup>†</sup>*p* < .10. Effect sizes for all comparisons are positive when in stereotypical direction and negative when in counter-stereotypical direction. ♦Effect size differs significantly (*p* < .05 or smaller) from .00 (exactly no difference). Effect sizes for individual styles are in positive direction if men use style more, or in negative direction if women use style more.

<sup>a</sup> Positive direction means more democratic, <sup>b</sup>*Q<sub>w</sub>* = -.0002.



*Study setting.* The model for study setting was significant. Post-hoc comparisons showed that the student non-simulation studies, i.e., students who rated their current supervisor on a paper-and-pencil test, significantly differed from all the other study settings (post-hoc comparisons with organizational studies,  $\chi^2 = 27.09$ ,  $p < .001$ ; training and assessment studies,  $\chi^2 = 9.97$ ,  $p < .02$ ; student simulation experiments,  $\chi^2 = 13.17$ ,  $p < .004$ ). For the paper-and-pencil test by student-raters counter-stereotypical effect sizes were found, whereas for all other type of studies findings that were in stereotypical direction were found.

However, these results are colored by type of leadership style. Inspection of Table 2.3 learns that for transformational and transactional leadership comparisons, only one comparison was not from an organizational setting (the study by Bass, Avolio & Atwater, 1996). Consequently, no conclusion on the impact of study type could be made for these leadership styles. Ten of the studies on interpersonal leadership and ten of the studies on task-oriented leadership were studies in organizations, which were contrasted with the student and assessment studies, five and three studies respectively. A tendency was found that in studies in organizational settings, effect sizes were larger: women were more interpersonal than men in these settings than in the other study settings (organizational  $d = -.22$ , other  $d = -.02$ ,  $\chi^2 = 3.12$ ,  $p < .08$ ). Furthermore, female leaders in organizational settings were less task-oriented than men in organizational settings, but female leaders were more task-oriented than men in all other settings (organizational  $d = .25$ , other  $d = -.38$ ,  $\chi^2 = 27.44$ ,  $p < .001$ ). The model for the impact of study setting on democratic versus autocratic was not significant, which may be due to the limited number of comparisons in this type of style ( $\chi^2 = 4.28$ , ns.).

*Rater type.* Whether the leadership styles were measured by leaders themselves, by subordinates, supervisors or by behavioral observations or content analysis, these measurements did not moderate the overall findings ( $Q_i = 2.39$ ,  $p < .50$ ), nor any of the individual styles (see Table 2.3).

Furthermore, it was tested whether in studies that had students as leaders and raters, the type of student (high-school, university, MBA) moderated the findings. MBA students differed from both university students ( $\chi^2 = 16.37$ ,  $p < .001$ ) and high-school students ( $\chi^2 = 11.43$ ,  $p < .003$ ) in that the effect sizes were more stereotypical. However, inspection of the individual leadership styles revealed that this finding can be attributed to a single study (Pratch & Jacobowitz, 1996).

A number of studies explicitly examined whether managers were perceived differently by different types of raters (e.g. self, subordinate, supervisor, observations). These '*within-leaders*' designs give additional insight in the impact of the type of rater. Lewis and Fagenson-Eland (1998) compared whether self-ratings with supervisor ratings on initiating structure and consideration. Female leaders from a federal government agency rated themselves as less task-oriented, but not more interpersonally oriented, than male leaders, whereas ratings by their supervisors did not show sex differences. Thus, self-ratings in this study were more stereotypical for task-oriented leadership. In a study of

transformational leadership of branch managers of an international bank, Carless (1998) found that both supervisors and managers themselves rated female managers higher on transformational leadership than men. Subordinates evaluated female and male leaders equally transformational. Thus, Carless found self- and supervisor ratings to be more stereotypical than subordinates' ratings.

A study of university hall directors was published in two documents, one reporting self-ratings of hall directors, the other reporting subordinate ratings (resident assistants) on transformational and transactional leadership (Komives 1991a; 1991b). Both studies reported no significant sex differences on either leadership style. Effect sizes tended to be smaller, however, for the subordinate ratings than for the self-ratings (see Table 2.3). Women tended to be less transactional and less transformational on both type of rater instruments, but more so for the self-ratings. Thus, self and other ratings tended to be counter-stereotypical for transformational leadership, but stereotypical for transactional leadership.

Johnson (1993), on the other hand, found no significant sex differences on self, subordinate and observational instruments on interpersonal leadership behavior by students acting as leaders in an organizational simulation. However, effect sizes (all in stereotypical direction) tended to be larger for the self- and subordinate ratings than for the observational ratings (see Table 2.3). Sakata and Kurokawa (1992, study 2) reported similar results from behavioral observations and self-ratings. The Japanese female students in their simulation study were more task-oriented and less interpersonal oriented, thus in counter stereotypical direction, on both behavioral and self-rating instruments.

Summarizing, from the meta-analysis it can be concluded that there is no evidence that type of rater influenced findings of sex differences. Results of studies that used several instruments to measure the leadership styles of a single manager were also mixed. However, a tendency was present that self-ratings, compared to subordinate ratings and observations, result in larger effect sizes – be it stereotypical or counter-stereotypical.

*Organizational setting.* Although the categorical model for organizational setting (e.g. business, educational, governmental) on all comparisons was marginally significant ( $Q_b = 7.47, p < .06$ ), none of the simple contrasts were. Inspection of the effect of organizational setting on the individual styles (see Table 2.3) revealed that the effect sizes for transformational leadership in business settings were larger than in educational settings; Female leaders in business settings were more transformational than female leaders in educational settings (post-hoc comparison  $\chi^2 = 6.96, p < .03$ ). Furthermore, in miscellaneous settings, which were in majority business settings-mixed with academia (Gibson, 1993, Gardiner & Tiggemann, 1999), female leaders tended to be more task-oriented than male leaders, whereas female leaders in governmental settings and especially in educational settings were less task-oriented than male leaders (post-hoc contrasts educational-miscellaneous,  $\chi^2 = 15.05, p < .001$ ; educational-governmental  $\chi^2 = 5.01, p < .08$ ; governmental-miscellaneous,  $\chi^2 = 4.73, p < .09$ ). Although the model for transactional leadership was significant ( $Q_b = 6.04, p < .05$ ), showing a tendency for



female leaders in educational settings to be less transactional than male leaders as well, post-hoc comparisons were not significant. The models for interpersonal styles and democratic versus autocratic styles were not significant.

There is only one study that directly examined the influence of different organizational settings on leadership styles of men and women. Gardiner and Tiggemann (1999) asked 60 female and 60 male managers in several male-dominated and female-dominated industries to give self-descriptions in terms of task-orientation and interpersonal orientation. The male-dominated contexts included the automotive industry, the timber industry, academia, and consulting and accounting firms, whereas the female-dominated contexts included beauty parlors, nursing and childhood education. Female managers were more task-oriented in male-dominated contexts and more interpersonally oriented in feminine contexts than male managers.

Summarizing, female leaders tend to be more task-oriented and transactional in business settings (and in male-dominated industries), whereas they are less task-oriented in governmental and educational settings than their male counterparts. Also, women are more transformational in business than in other settings. This suggests that female leaders may show generally more leadership styles when they are in gender-role incongruent contexts.

*Hierarchical level.* There was no evidence that hierarchical level influenced the overall comparisons. However, the hierarchical level model for transformational leadership and for task-oriented leadership were significant (transformational  $Q_b = 9.09, p < .03$ , task-oriented  $Q_b = 29.47, p < .001$ ). Post hoc comparisons on the effect of a leader's level on transformational leadership showed that female leaders were more transformational in the mid- and higher level leadership positions, whereas the male leaders were more transformational on the lower level ( $\chi^2 = 4.34, p < .04$ ). Post-hoc comparisons for task-oriented leadership showed that in studies in the higher hierarchical levels, female leaders were more task-oriented than male leaders, whereas in studies of middle and lower level management male managers were more task-oriented than female managers (post-hoc comparisons top/middle – middle/low,  $\chi^2 = 15.05, p < .005$ ; top/middle – low,  $\chi^2 = 22.97, p < .001$ ). None of the other styles showed significant effects for hierarchical level.

Summarizing, to the extent that women work in higher level leader roles, women are more transformational than male leaders, whereas male leaders are more task-oriented and transformational than female leaders in the lower levels of management.

Inspection of some relevant individual studies allows a better understanding of the complexity of the relationship between organizational level and the size of a stereotypical difference between male and female managers. Bass, Avolio and Atwater (1996) reported substantial support for stereotypical differences for (mostly) higher level leaders in Fortune 50 firms (see also Bass & Avolio, 1994), reported little support for differences between male and female middle level leaders in small organizations, and no support in a large sample of all-level leaders. In these studies, differences between male



and female leaders were more pronounced at the higher organizational levels. However, an alternative explanation is the size of the organization. In large Fortune 50 companies the range of organization levels is larger, and female and male managers may differ more than is possible in smaller firms. Moreover, the few female leaders in these Fortune 50 firms form exceptions and may be less representative of female managers in general than their male colleagues are of male managers in general.

Lewis and Fagenson-Eland (1998) explicitly studied the impact of sex and organizational level on task- and interpersonally oriented leader behaviors, using self and supervisor ratings. They found that high level leaders were rated more interpersonally oriented than lower level leaders by supervisors. No difference between high and lower level was found for self-ratings of leadership styles. Furthermore, no interaction effects of sex and organizational level were found on either self- or supervisor ratings.

Finally, Maher (1994) did not find evidence for sex differences in the effect of organizational level on ratings of transformational or transactional leadership.

From these and other studies it can be concluded that there is no simple relationship between hierarchical level and stereotypicality of leadership behavior. Many context variables may influence this relationship, and sometimes confounding of variables, such as for instance hierarchical level, organizational setting and size of firm, may affect an easy interpretation of results.

### *Continuous Models*

Four continuous models were tested to account for possible variance in effect sizes. It was tested whether sex-composition of the management layer, sex-composition of the subordinate layer, sex-composition of the authors of a document, and date of publication affected sex differences in leadership styles. Results for all comparisons and individual leadership styles are presented in Table 2.4. Sex-composition of leaders, sex-composition of the subordinates, the proportion of men among the authors and publication date of a study did not relate to the overall effect size. However, a marginal effect was found for sex-composition among the leaders for the transformational style comparisons. The higher the proportion of male leaders in a particular study, the more female managers are rated as transformational ( $b = -.54, p < .09$ ). There was also a tendency for sex-composition of the authors to predict transactional leadership. Female managers are rated more transactional when the proportion of male authors increases ( $b = -.80, p < .06$ ). Finally, in the more recent studies of transformational leadership, female leaders were rated relatively more transformational ( $b = -.78, p < .01$ ).

Unfortunately, the continuous models for sex-compositions can not account for possible skewed ratios *within* a sample. The studies by Jantzi and Leithwood (1996) and Lee, Smith and Cioci (1993), for instance, report that the female principals have relatively more female teachers as their subordinates and the male principals more male teachers. These differing sex-compositions are not accounted for in the above analyses; the sex-compositions are pooled over the entire population of a study. Moreover, sex of

Table 2.4  
Continuous models for Sex Differences in Leadership Style

| Predictor                                 | All comparisons |      |         | Interpersonal style comparisons |      |         | Task style comparisons |      |         | Democratic vs autocratic comparisons <sup>a</sup> |              |         | Transformational style comparisons |      |                    | Transactional style effect sizes |      |                   |
|---|-----------------|------|---------|---------------------------------|------|---------|------------------------|------|---------|---|--------------|---------|------------------------------------|------|--------------------|----------------------------------|------|-------------------|
|   | n               | b    | $\beta$ | n                               | b    | $\beta$ | n                      | b    | $\beta$ | n   | b            | $\beta$ | n                                  | b    | $\beta$            | n                                | b    | $\beta$           |
| Sex-composition subordinates <sup>b</sup> | 22              | -.46 | -.30    | 3                               | .81  | .75     | 3                      | -.74 | -.36    | 1   | <sup>c</sup> |         | 10                                 | .28  | .25                | 5                                | .16  | .14               |
| Sex-composition leaders <sup>b</sup>      | 45              | -.14 | -.06    | 11                              | .65  | .35     | 11                     | -.13 | -.04    | 4   | 3.08         | .82     | 11                                 | -.88 | -.54 <sup>#</sup>  | 6                                | .08  | .06               |
| Author sex <sup>b</sup>                   | 55              | -.12 | -.11    | 16                              | .09  | .09     | 14                     | -.27 | -.14    | 8   | .04          | .07     | 11                                 | -.14 | -.20               | 6                                | -.36 | -.80 <sup>#</sup> |
| Date of publication                       | 55              | .03  | .21     | 16                              | -.04 | -.39    | 14                     | .03  | .17     | 8   | .05          | .50     | 11                                 | -.07 | -.78 <sup>**</sup> | 6                                | -.02 | -.31              |

Note. \*\*\*  $p < .001$ , \*\*  $p < .01$ , \*  $p < .05$ , #  $p < .10$ . Effect sizes for 'all comparisons' are positive when in stereotypical direction and negative when counter-stereotypical. Effect sizes for individual styles are in positive direction if men use style more, and in negative direction if women use style more.

$b$  = unstandardized regression coefficient,  $\beta$  = standardized regression coefficient.

<sup>a</sup> Positive direction means more democratic, <sup>b</sup> Proportion of men among authors, subordinates, or among leaders, <sup>c</sup> Only for the Komives study sex-composition of the subordinates could be calculated.

rater also confounds the findings in these cases.

Only few studies have explicitly studied the influence of sex-composition of the context on leadership behavior. In a controlled organizational simulation, using behavioral observations, Johnson (1993) found that male and female leaders led their (two) subordinates similarly if they were of the same sex as the leader. When the two subordinates were of the opposite sex, both male and female leaders were observed to be more task-oriented. However, in the self-ratings and subordinate ratings, this interaction effect for task-oriented leadership was not found. No effects for sex-composition of the subordinate team were found for democratic-versus-autocratic and interpersonal leadership styles.

Some organizational studies also address the sex-composition issue. Komives (1990b) asked residence assistants to describe their hall directors in terms of transformational, transactional and laissez-faire leadership behavior. She found a tendency for female assistants to describe their male director as more transformational and less laissez-faire than directors in female-female, male-female and male-male assistant-director-pairs were described.

A contrasting finding was reported in a study among male and female leaders in respectively all-female and all-male religious orders (Druskat, 1994). Female leaders were rated more transformational than male leaders. Druskat argues that, in a situation where they are the rule rather than the exception, women do not need to conform to masculine typed styles and are free to use the style that better suits them.

In the earlier mentioned study by Gardiner and Tiggemann on male-and female-dominated industries it was found that female managers were more task-oriented in male-dominated contexts and more interpersonally oriented in feminine contexts than male managers. This suggests that female leaders adapt to the organizational context, acting more congruent with the female- or male-dominated setting

In summary, in the meta-analysis there was not much evidence found for the sex-composition of a work environment to affect the behavioral styles of male and female managers. There was a tendency for female leaders to be more transformational when there are more men among the leaders assessed. However, study by Gardiner and Tiggemann on interpersonal and task-oriented leadership suggested that female leaders adapt to the organizational context by being more interpersonal in female-dominated settings and more task-oriented in male-dominated settings, whereas Johnson found that gender-role incongruent settings elicited task-oriented behavior.

## 2.4. Summary and Conclusion

In this Chapter it was investigated whether there are sex differences in leadership styles, and whether their occurrence is influenced by contextual factors. Results of the meta-analysis supports the notion that male and female leaders lead, to some extent, in different ways. When all studies in the sample were aggregated, it was found that 67% of the findings were in stereotypical direction, that is, that male leaders tend to use the



traditionally masculine styles more often and female leaders the traditionally feminine styles. However, the overall effect size was small ( $d = .09$ ), suggesting that less than 1 percent of the variance in leadership styles can be explained by sex of the leader. Sex differences in leadership styles were more pronounced for some styles than for other styles. On the stereotypical feminine styles democratic-versus-autocratic and on transformational leadership, significant findings were found in stereotypical direction ( $d = -.19$  and  $d = -.10$ , respectively), but no evidence was found for sex differences in interpersonal leadership. None of the stereotypical masculine styles, task-oriented leadership and transactional leadership, showed a significant effect size.

Thus, female leaders excelled on the two leadership styles that are considered as most important in present-day organizations: transformational leadership and democratic-versus-autocratic leadership. In fact, in a meta-analysis of the effectiveness of transformational and transactional leadership, Lowe, Kroeck and Sivasubramaniam (1996) found that leaders were more effective to the extent that they are more transformational.

Two classes of influences on sex differences or similarities in leadership styles were examined; the influence of study characteristics, i.e. the specific research context and methodological set-up of studies, and the influence of organizational contexts, i.e. the type of organization, the level of leadership and the sex-compositions in organizations that were studied.

#### *The Influence of Study Characteristics on Sex Differences in Leadership Styles*

No evidence was found for the prediction (Prediction 1) that effect sizes are smaller in organizational settings than in assessment- or in laboratory settings. On the contrary, effect sizes were larger in organizational studies than in all other type of studies (training/assessment studies, student simulation studies and student-paper-and-pencil studies). More specifically, female leaders were more interpersonal and less task-oriented than male leaders in organizational settings, compared to other settings. Perhaps this finding indicates that in today's organizational world, female leaders are not so much an exception anymore and, as a consequence, feel less obliged to conform to the surrounding expectations of male leader behavior. However, considering the small number of studies included in the analysis of study setting, these conclusions may be premature. It will be worthwhile to keep track of new studies to see whether this trend will continue.

There was no evidence to support the prediction (Prediction 2), that sex differences are more stereotypic when based on self reports than on subordinate ratings. The type of rater did not influence the findings on an overall basis, nor for the individual leadership styles. Whether raters of leaders were high-school students, university students or business students did not influence the findings. This lack of impact of rater type gives us some trust in the reliability of the ways various leadership styles are measured. It should be noted, however, that type of rater in a study was confounded with leadership styles, as most transformational comparisons were based on subordinate ratings, where-

as most interpersonal and task-oriented comparisons were based on self-ratings. This hampers interpretation of the influence of rater type, and points to the need of more method variation in future research on leadership styles.

#### *Explaining Findings from Organizational Characteristics*

It was found that type of organization influenced the sex differences in leadership styles, but the effect sizes were qualified by type of leadership. The finding that female leaders are more transformational than male leaders is stronger in business than in educational settings. Furthermore, sex differences in task-oriented leadership were more pronounced in educational settings than in government settings, in both settings men being more task-oriented. In the miscellaneous (mainly business) settings, there was a tendency that female leaders were more task-oriented than male leaders. The same tendency was found for transactional leadership: In the miscellaneous business settings female leaders tended to be more transactional, whereas in the educational settings male leaders tended to be more transactional. No effects were found for sex differences in interpersonal leadership or democratic-versus-autocratic leadership styles.

These results show an interesting pattern: To the extent that leaders are 'out of role', i.e. men in educational settings, women in business settings, sex differences in transformational, task-oriented and transactional leadership are more pronounced. These results suggest that male and female leaders may have compensated for their being 'out of role', by showing a higher level of leadership behavior.

Prediction 3, that organizational level does not influence sex differences in leadership styles was corroborated when the all leadership styles were considered. The models for transformational and task-oriented leadership, however, were significant. The results were strikingly similar to the findings of the organizational settings: To the extent that women work in the higher, more gender-role incongruent settings, women are more transformational and more transactional than male leaders, whereas male leaders are more task-oriented and transformational in the lower managerial levels. It may be the case that these two classes of moderating variables are confounded.

Prediction 4 concerned the influence of sex-compositions of both the management layer and the subordinate team on sex differences in leadership styles. Overall, no evidence was found for the influence of sex-compositions. However, a tendency was found that to the extent that there were more men among the leaders that were assessed, female leaders tended to be more transformational. Again, this finding may relate to the previous mentioned findings of organizational setting and hierarchical level, as all three variables are likely to be confounded. In masculine-typed organizations (such as business and manufacturing), and in higher levels of management, the proportion of male leaders is obviously larger than in feminine-typed organizations (such as education and health care), and in lower levels of management.

Summarizing, although the overall results, cumulated over the different leadership styles, suggest that organizational variables were not important in explaining sex dif-



ferences or similarities in leadership styles, results for the stereotypical masculine styles, task-oriented leadership and transactional leadership, were influenced by the organizational context. More-over, the results suggest that male and female leaders are more task-oriented and transactional to the extent that they occupy positions that are more gender-role incongruent. Also, the effect that women are more transformational than men is more pronounced in relatively more masculine-typed organizational settings, relatively higher levels of management and in more male-dominated leader positions.

### *Limitations*

There are some important limitations to the meta-analysis. First, the small number of comparisons, together with the confounding of the different study and organizational variables that were examined for its influence on sex differences in leadership styles, did complicate the testing of models, and consequently, interpretations of the meta-analytic data should be cautious. The inspection of individual studies that explicitly tested predictions on the influences of contextual variables helped to clarify the relations between gender, leadership styles and contextual variables.

Second, in this study research was addressed that was published in peer reviewed journals. Meta-analysts have emphasized the importance of including unpublished reports (see for a discussion Johnson & Eagly, 2000). Exclusion of unpublished studies may lead to misrepresenting actual differences or similarities. However, Eagly and Johnson (1990) did not find a difference between published and unpublished reports in their earlier review. Although a possible publication bias cannot be excluded, inspection of the statistical properties of the sample (see Method, section Analyses) did not show evidence for a 'publication bias'.

Finally, the multi-dimensional nature of some of the leadership instruments (e.g. the MLQ scales consist of several sub-scales that measure very different constructs (see for instance Kark & Shamir, 2001; Maher, 1997) makes unambiguous interpretations more difficult. Therefore, future research (both primary and meta-analysis) may profit more from analyses at the sub-scale level.

### *Past and Future: Trends in Time and Implications for Further Research*

The present results shows similarities as well as differences from the earlier review by Eagly and Johnson (1990). Overall, it was found that sex differences were most prominent in two classes of leadership styles: female leaders were more democratic than male leaders, and female leaders were more transformational than male leaders. Transformational (and transactional) leadership was not yet included in the review by Eagly and Johnson. Democratic leadership is, however, conceptually linked to with transformational leadership, which has become the central focus of today's leadership theories. This style, more often used by women than by men, emphasize employee empowerment and participation in decision making. So far, the results of the earlier and recent review are similar.



Contrary to expectations, few differences were found between leadership styles of male and female leaders in studies using an assessment methodology, whereas organizational studies showed most differences. Together, these findings – that sex differences in leadership styles have not at all disappeared and that they are found especially in organizational studies – may imply that female leaders, maybe because they are not anymore so much of an exception as they used to be, feel less obliged to adapt to traditionally masculine ways of leading as they used to.

The picture appearing after reviewing studies of this last decade, is one of leadership as a highly contextualized phenomenon. Simple claims of sex differences in leadership styles need to be considered in close scrutiny with particular characteristics of study-, perceptual- and organizational factors. As was argued in this chapter, the intertwining of different contextual features, both methodological and organizational, obfuscates relations between gender, leadership style and context. Future research should try to disentangle the several contextual factors. For example, ideally, research on the impact of macro-contextual variables such as industry type (for example profit versus non-profit industry, service versus technological industry, small versus large firms) should take into consideration both meso-contextual variables such as organizational structure and - culture, as well as micro-contextual variables such as leader characteristics and team characteristics, and vice versa. Studies considering the impact of a single micro-, macro- or meso-level contextual variable should try to exclude confounding of their main variable of interest with other contextual variables on any level. Every researcher who sets out to do this in an organization, however, will face problems as reality itself is intertwined and confounded.

## Chapter 3

### Design and Method of the Field Study

The objective of the field study that will be reported in Chapter 4 and Chapter 5 is to examine the impact of the gender-typing of the immediate working context on the perception and evaluation of male and female leaders in a quasi-experimental field study. In this chapter the design and method of this field study are introduced. The first part of the chapter elaborates on the choices for and design of the field-study. An outline is presented of the field setting, a retail organization that administers department stores. The second part of the chapter highlights the methodology used in the subsequent chapters. In this section, the instruments are described that are used for measuring the gender-typing of the context, the measurement of leadership styles and the evaluation of managers. Furthermore, statistical properties of these instruments are addressed. The last section of this chapter explicates the statistical procedures needed for testing the hypotheses that will be introduced in Chapter 4 and 5. Although part of the study uses familiar analytical methods such as linear regression analysis, most hypotheses will be tested with Multilevel Random Coefficient Models.

### 3.1 Design of the Study

Context is suggested as the crucial factor in understanding the way in which male and female leaders are perceived. In the preceding chapters a variety of meanings passed in the review of the 'container concept' context in relation to leadership. It may refer to peculiarities of a research setting, characteristics of an organization, characteristics of a leadership position or demographic features of a leader or of the leader's subordinate group, to mention just a few. Any of these contexts may have a unique contribution in understanding sex differences or similarities in leadership. In most research, however, several contextual variables vary at the same time, making it hard to decide which feature was responsible for what result (see previous chapters).

One way to overcome confounding of organizational variables is the use of controlled laboratory experiments, in which it is possible to systematically vary certain context variables while controlling for others. In most laboratory experiments students, most often psychology or business students, act as leaders and subordinates in simulated organizational situations. The ecological validity of such research is however questionable. Students may be dissimilar to actual leaders and laboratory experiments lead to different results than organizational studies (Eagly & Johnson, 1990).

As the present study wanted to examine 'real' leaders, a quasi-experimental design in field settings was preferred. From existing research, as reviewed in the previous chapters, it was deduced that an important factor in the perception and evaluation of male and female leaders was the extent to which leaders occupy positions in organizational contexts that are gender-typed. The gender-typing of contexts can be inferred from the sex-ratios in organizational contexts (i.e. the proportion of men and women in industries, organizations, or organizational echelons), as well as from the *psychologically* congeniality of organizational contexts (i.e. whether people consider an industry, or (part of) organization as a suitable work environment for men/women in general). From



Chapter 2 it was also clear that one needs to specify whether one is examining the gender-typing of the organizational context from a macro-, meso- or micro-perspective, i.e. whether one is studying the impact of industry type or organizational type (macro-level), the impact of the hierarchical level (meso-level) or the impact of the immediate working environment of a leader (micro-level). Although often the gender-typing of these organizational levels may coincide, this is not necessarily so. Moreover, the processes for the perception and evaluation of male and female leaders may not be equivalent, or even interact between the different levels of analyses.

In the search for differently gender-typed organizational contexts, initially a 2 (macro-level: feminine-typed versus masculine-typed organization) x 2 (micro-level: feminine-typed versus masculine-typed department) x 2 (sex of the manager) design was pursued. As the meso-level was left out of consideration in the present study, the hierarchical level, managerial resources, status and power, the number of subordinates supervised and their tasks of the leaders studied should ideally be the same.

As criterion for masculine-typed and feminine-typed organizations the sex-ratio within an organization, i.e. whether an organization is male-dominated or female-dominated, was used. Male-dominated and female-dominated industries were distinguished on the basis of the percentage of men and women plus or minus 15% actually working in an organization, corrected for the female labor participation in The Netherlands, which was 42% in 1994 (cf. Tijdens, 1989). Organizations that employ 57% or more women ( $42\% + 15\%$ ) were defined as feminine-typed and organizations that employ less than 28% women ( $42\% - 15\%$ ) were defined as masculine-typed organizations<sup>1</sup>.

However, no masculine-typed industry in The Netherlands was found that had a substantial amount of female leaders in comparable managerial jobs as male leaders<sup>2</sup>. Furthermore, in the visits that were carried out to examine selected organizations, it

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<sup>1</sup> An alternative definition of feminine-typed and masculine-typed organizations rests on whether the core business or central profession is characterized by features that are either stereotypical masculine (powerful, technical) or stereotypical feminine (caring, serving). These two definitions overlap to a large extent. Numerically female-dominated organizations are most often service-oriented industries, such as health care and early childhood education. Numerically male-dominated organizations are more often technical and manufacturing organizations.

<sup>2</sup> For instance, in the printing industry 22,6% of the 53.000 workers are women (Enquête Beroepsbevolking, 1994), but closer examination learned that most of the women in this industry worked in female-dominated sections of the printing industry, such as in copy-shops (usually self-service, 'Xerox' shops), or in secretarial jobs and the human resource department. Of the male-dominated section of this industry, the printing houses, the over 8000 line and middle managers in the printing industry only three were women (Personal communication, A. Boute, Royal Society for the Graphic Industry). Another example is the audio-video products industry (53.000 workers of which 18,9% women, Enquête Beroepsbevolking, 1994), where there were only three female managers in other than human resource departments. Two of these women were high- to mid-level managers and the third was a line manager. As it turned out, these three women could not be matched with male counterparts in this organization, as other organizational factors (department size, positional power) were not comparable.

soon became obvious that comparing managers from more than one organization would immediately lead to confounding of gender-typing of the organization with several other variables that may have an impact on leader behavior, such as a leader's positional power and resources, organizational size and structure, company policy and corporate mission and culture. Thus, it was decided to look for a single organization that had a satisfying number of female and male leaders in comparable, feminine-typed and masculine-typed managerial positions. These requirements were met in a retail organization that administers a chain of department stores in The Netherlands. Department stores accommodate masculine-typed departments, such as the electronic equipment department, feminine-typed departments such as the ladies clothes, and departments that are more gender-neutral such as the book and furniture department. In the following chapters, department managers are the leaders who are studied. Fortunately, the retail organization employs a flexibility and employability policy, which makes department managers routinely transfer between departments and department stores. As a consequence, both male and female managers work at feminine- and masculine-typed departments. In the next paragraph the retail organization and its personnel are described in more detail.

*Department Stores: From Brassieres to Lawn Mowers*<sup>3</sup>

The retail organizations in which the study took place comprises of more than 60 department stores in The Netherlands, which are subdivided on the basis of size into: (a) capital stores, which employ more than 300 employees, city stores (between 100 and 200 employees) and town stores (less than 100 employees). Each department store accommodates a number of specialist shops. In fact, each department store accommodates several chain stores, called 'product groups' in one. Examples of product groups are: electronic equipment (video, audio and telephone equipment, personal computers, household electronic equipment, personal care electronic equipment, etceteras); audio and video recordings; women's wear; men's wear; lingerie; babies' and children's articles; fashion accessories and perfume; home furnishing (furniture, curtains etceteras); household articles (kitchen utensils, crockery etceteras); office equipment; books and magazines; toys and games; garden, travel and outdoor equipment; sportswear and sports goods; patisserie; and food (coffee shop and restaurant). The organizational structure of the department stores can be typified as a matrix organization (Mintzberg, 1979). A sales executive, who is responsible for 'his/her' chain of shops, leads a product group. Furthermore, each store is lead by a business leader who is responsible to one of

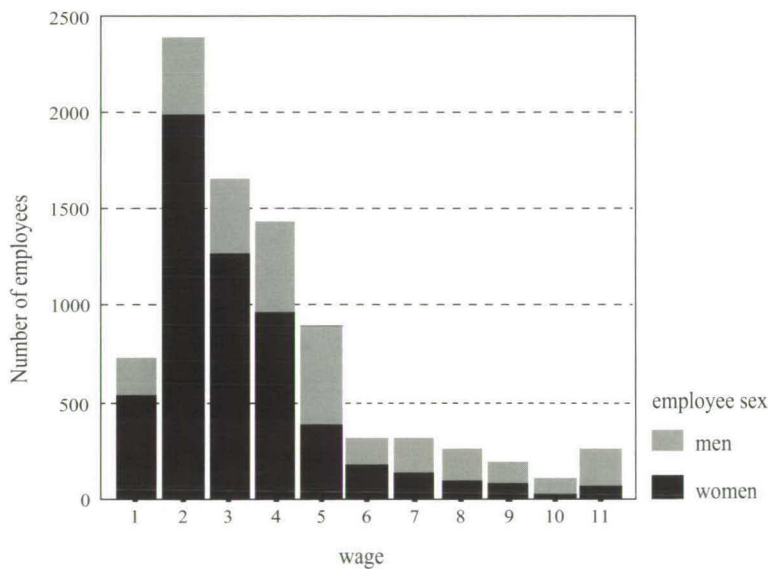
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<sup>3</sup> In the years that the managers of this retail organization were studied, I undertook several participant observations (as a shop assistant at an electronic equipment department, lingerie department and women's wear department, as an 'assistant' to several department managers and as an assessor of the manager recruitment assessment day. The information in this section is based on these observations (see also van Engen, 1997 and van Engen & Benschop, 2000) and on company information that was made available to me.

three business executives, one for the capital stores, one for the city stores and one for the town stores. The ‘spiders in the web’ are the department managers, who are responsible for governing a product group within a store and are responsible to both the sales leader and the business leader.

A department manager is in charge of between 10 to 50 shop assistants consisting of: cash desk assistants, sales assistants, provisioning assistants and the department manager deputy. The tasks of a department manager comprise, among other things, of: (a) product acquisition, assortment, and product presentation (in consultation with the sales executive); (b) budget management, personnel planning, department furnishings and security (in consultation with the business leader); (c) personnel and organization management as regards to collective labor agreements, absence, selection, training and coaching personnel (in consultation with the human resource department). Furthermore, the department manager is expected to work alongside their sales personnel. In fact, the department manager is a kind of ‘franchise holder of a specialist shop’ (personal communication human resource executive of the company, 1996).

Figure 3.1 A  
*Vertical Sex-Segregation: Number of Male and Female Employees per Wage Scale*



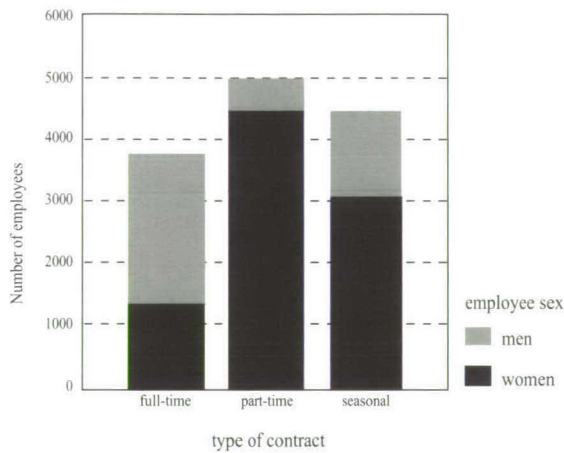
*Vertical and Horizontal Sex-Segregation*

In 1995, more than 13.000 people were employed in the department stores, of which 67% were women. Figure 3.1.A. shows the percentage of male and female workers in the different echelons of the organization. The organization is characterized by a vertical sex-segregation: the higher the level, the fewer the women. Of the shop assis-



tants, who work in categories 1 to 4, the majority of personnel, namely 77%, are women. From the specialists, such as the window dressers, tailors, bakers, photographers and the department manager deputies, 43% are female. At the department managers' echelons, in wage scales 6 until 10, almost 40% are women. However, at the lowest department manager level (level 6) the sex-ratio is almost 50-50, and at level 10 the percentage of women among department manager is shrunk to 20%. Of the Chief Executives Officers (CEO's), 2.2% are women.

*Figure 3.1 B*  
*Number of Employees with Full-time Part-time and Seasonal Contracts*



A large proportion of the personnel (57% of the workers with permanent jobs) works part-time, which suits the company's opening hours (approximately 70 hours a week). The percentage of women among part-timers was 89%, whereas the percentage of women among full-timers is 36%. Seventy-six percent of the female workers work in part-time jobs, compared to 6% of the male workers (see Figure 3.1.B.). The distribution is more skewed than in Dutch society at large (62% of the women work in part-time jobs, 16 % of the men in 1995). Women not only work part-time more often, but have less permanent contracts as well. In 1995, the percentage of part-time workers of the department managers is nil, and part-time working for department managers, although officially permitted, is unofficially discouraged (van Engen, 1997; van Engen & Benschop, 2000). Thus, women in this organization are over represented in the temporary, and smaller jobs. If they are in managerial positions, they have smaller salaries.

There is also a horizontal sex-segregation visible. At the electronic department almost all shop assistants are men. Also, at the outdoor, sports, and video and audio departments, more men than women are employed as shop assistants. The number of male shop assistants at the women's wear, lingerie, and baby clothing departments is limited to a few individuals. All other departments employ both men and women.

Although in many organizations the 'women's' departments are the departments with less resources and opportunities (see for instance Kanter, 1977; Tijdens, 1989), this is not the case for this retail organization. The department that is most important from a financial viewpoint, is the women's wear department, a department in which almost exclusively women work. Accordingly, the managers of the women's wear department are influential in the business meetings of the store (van Engen, 1997). Obviously, more male shop assistants work at departments that sell 'technical' and 'leisure' goods. Sex-composition of the workgroup and the gender connotation of a product group will be discussed later in this chapter when the measurement of gender-typing of the departments is addressed.

### 3.2 Method

#### *Sample*

Four of the capital department stores (i.e. stores with more than 300 employees) were selected for this study, each one accommodating around 20 departments. Questionnaires were distributed to a total of 931 shop assistants. In total, 364 questionnaires were returned. The response rate, 39%, is reasonable compared to the response rate in earlier studies in this organization (less than 25%, personal communication, human resource executive). Thirty-five respondents were eliminated from the analyses because information on one or more of the independent variables (manager sex, shop assistant sex, shop assistant work hours or gender-typing of the department) was missing. The final sample consisted of 327 shop assistants (253 women and 74 men) working in 70 departments with 40 male and 30 female managers. The business leaders of all four department stores were men.

In Table 3.1 characteristics of the male and female respondents are given. Respondents were on average 27 years old (men 28, women 26,  $t = .76$ , *ns.*), and had 7 years of experience in the organization (men 9, women 6,  $t = 1.82$ , *ns.*) Most respondents' highest educational level was high school (19 % MAVO, 21% HAVO/VWO, difference between men and women  $\chi^2(2,327) = 9.18$ , *ns.*), although a substantial proportion of the shop assistants were students working part-time (around 40% of the sample). They worked on average 21 hours a week (men 22, women 20,  $t = 1.36$ , *ns.*). Thirty-five percent of the respondents were employed in permanent position, 50% for a 1-2 year position, and 14% were seasonal workers (difference men and women  $\chi^2(2,327) = .39$ , *ns.*). Of all respondents 92% were of Dutch origin, 5% were from Mediterranean origin, 2% came from other European countries and one respondent was African (sex difference Dutch - not Dutch  $\chi^2(2,327) = .45$ , *ns.*). Comparisons with the company's social annual report 1996 showed that the sample (see Table 3.1 last columns) was a good representation of the company's population, although women and younger employees were slightly over represented. This may as well be a result of the fact that the annual report figures also include managers, head office personnel and staff personnel of the organization.

Table 3.1

*Type of Contract, Age, and Work Experience by Sex, in the Sample and in the Company (from Annual Report)*

|                      | sample |       |                |                  |    | company        |              |
|----------------------|--------|-------|----------------|------------------|----|----------------|--------------|
|                      | N      |       | proportion men | total categories |    | proportion men | % categories |
|                      | men    | women |                | N                | %  |                |              |
| Type of contract     |        |       |                |                  |    |                |              |
| permanent            | 31     | 100   | .31            | 134              | 37 | .35            | 57           |
| seasonal             | 32     | 96    | .25            | 128              | 35 | .30            | 34           |
| temporary            | 17     | 66    | .20            | 84               | 23 | .27            | 10           |
| Age category (years) |        |       |                |                  |    |                |              |
| 16-19                | 30     | 144   | .17            | 174              | 48 | .28            | 22           |
| 20-24                | 20     | 29    | .41            | 49               | 14 | .31            | 20           |
| 25-34                | 10     | 36    | .22            | 47               | 13 | .29            | 19           |
| 35-44                | 7      | 20    | .26            | 27               | 7  | .43            | 15           |
| 45-54                | 13     | 28    | .32            | 41               | 11 | .35            | 19           |
| 55+                  | 1      | 10    | .10            | 11               | 3  | .31            | 4            |
| Experience (years)   |        |       |                |                  |    |                |              |
| 0-1                  | 21     | 77    | .21            | 98               | 27 | .29            | 29           |
| 1-2                  | 13     | 64    | .17            | 78               | 21 | .29            | 11           |
| 3-5                  | 13     | 32    | .29            | 45               | 12 | .25            | 19           |
| 6-10                 | 11     | 30    | .27            | 44               | 12 | .25            | 10           |
| 11-20                | 6      | 40    | .13            | 47               | 13 | .31            | 17           |
| 21-30                | 13     | 24    | .35            | 37               | 10 | .59            | 11           |
| 30                   | 4      | 4     | .50            | 8                | 2  | .74            | 3            |
| Work hours           |        |       |                |                  |    |                |              |
| 0-10                 | 17     | 27    | .39            | 44               | 12 | a              | a            |
| 11-20                | 25     | 135   | .16            | 161              | 44 | a              | a            |
| 21-30                | 6      | 37    | .14            | 44               | 12 | a              | a            |
| 31+                  | 32     | 67    | .32            | 101              | 28 | a              | a            |

Note. Due to missing data, totals sometimes differ from the sum of the Ns and the percentages.

<sup>a</sup>No information available.

Some background information on the managers was collected by means of questionnaires. The response rate of the managers was low, 33% (17 men and 9 women, of the approximately 80 managers). From the managers that responded the men were on average 41 years and the women 29 years old ( $t(2,24) = 5.76, p < .001$ ). Men also had more years of experience (men on average 13 years, women 5 years,  $t(2,24) = 3.67, p < .001$ ). Officially all managers worked between 32 and 40 hours a week (men and women equally,  $t(2,24) = .80, ns.$ ), but 71% regularly worked more than the hours they are paid for (no difference between men and women  $t(2,19) = .28, ns.$ ). The male and female managers were equally high educated (40% MBO,  $\chi^2(5,25) = 5.37, ns.$ ). All managers in the sample were from Dutch origin. There were no data available to decide whether these managers reflect the organizational population of managers.

Some information of non-work roles and career aspiration were also collected. Marital status of the male and female managers did not differ ( $\chi^2(2,26) = 2.22, ns.$ ), neither did they differ in whether they had children or not (58% did not,  $\chi^2(4,26) = 6.56, ns.$ ). But the male and female managers did differ in their non-work roles (household duties,  $\chi^2(3,26) = 11.27, p < .01$ ; care for children,  $\chi^2(2,19) = 9.00, p < .02$ ). Of the 17



men, 9 responded that their partners were responsible for the household duties, six said they shared these with their partner and two did the household duties themselves. In contrast, none of the nine female managers indicated that their partner was responsible for the household duties, instead, four of the women said that they did the household duties themselves, three shared them with their partner and two hired a third party. Five of the seven men with children indicated that their partner took care of the children. Two of the seven men indicated that they shared the care for children. In contrast, the two women who answered this question, both indicated that they hired somebody to care for the children. Finally, the men and women did not differ in their career aspirations ( $\chi^2(3,18) = 1.19, ns.$ ), 42% indicated that they aspired to become business or sales leader and estimated to have an average probability to realize this goal ( $\chi^2(3,18) = 2.22, ns.$ ).

### *Procedure*

The researcher and a research assistant handed questionnaires personally to each shop assistant present in the department store on the longest and busiest day of the week. At this time, shop assistants were told that the questionnaires would be treated confidentially. Also, anonymity was assured in the instruction of the questionnaires. Shop assistants were asked to fill out the questionnaire and return it to the researcher or the assistant the same day or to send the questionnaire by mail in the accompanying self-addressed envelope. In the personnel cafeteria, pencils and posters were distributed to remind the shop assistant of the questionnaire. Furthermore, at the personnel exit, tables, chairs and pencils were provided. Respondents who returned a questionnaire were rewarded with a cinema voucher (5 Dutch Guilders (2.27 Euro)) Every department received a number of spare questionnaires and envelopes for those shop assistants who were not working that day.

### *Instruments*

*Gender-typing of the departments.* The gender typing of departments was determined in a pilot study using a Q-sort technique (Stephenson, 1953). Thirty-four respondents (17 men, 17 women, age between 18 and 68, recruited at a cafeteria of Tilburg University) received cards with the names of all department types that were included in the sample (19 departments). The respondents were asked to place these cards into five boxes that represented the following categories: 'typically feminine' (1), 'more or less feminine' (2), 'gender neutral' (3), 'more or less masculine' (4), or 'typically masculine' (5). A forced choice paradigm was used; respondents were instructed to place three cards in boxes (1) and (5), four cards in boxes (2) and (4) and five cards in the middle box (3). The instruction was as follows: 'These cards all have the names of departments you can find at [name] department stores [the respondents were handed the cards]. Each of these departments has its own character. A way to characterize these departments is to describe them according to their 'masculinity' or 'femininity'. So, there are departments you may call typically feminine, more or less feminine, more or less masculine, or departments that have a par-

Table 3.2

*Average Scores of the Departments on Q-sort Ratings of Femininity to Masculinity (1 = 'typically feminine', 5 = 'typically masculine'), Number of Male/Female Raters and Number of Male/Female Managers that were rated.*

| Department                       | average<br>score | rater<br>M/F | manager<br>M/F | Department                         | average<br>score | rater<br>M/F | manager<br>M/F |
|----------------------------------|------------------|--------------|----------------|------------------------------------|------------------|--------------|----------------|
| Women's wear                     | 1.18             | 1/39         | 1/3            | Home furnishing                    | 3.21             | 8/4          | 3/0            |
| Lingerie                         | 1.26             | 0/16         | 1/3            | Books & magazines                  | 3.50             | 3/7          | 2/1            |
| Perfume                          | 1.68             | 2/25         | 0/4            | Office equipment                   | 3.97             | 8/20         | 4/0            |
| Fashion accessories <sup>a</sup> | 1.68             | 8/48         | 1/4            | Outdoor equipment                  | 4.06             | 1/2          | 1/1            |
| Babies' & children's articles    | 2.03             | 0/20         | 0/4            | Sports wear & sports gear          | 4.12             | 6/4          | 3/1            |
| Household articles <sup>a</sup>  | 2.12             | 2/17         | 4/1            | Audio and video recordings         | 4.74             | 6/15         | 4/0            |
| Patisserie                       | 2.38             | 0/4          | 0/1            | Men's wear <sup>a</sup>            | 4.85             | 4/20         | 3/4            |
| Drugstore                        | 2.68             | 1/0          | 0/1            | Electronic equipment <sup>a</sup>  | 4.88             | 14/1         | 4/1            |
| Budget shop                      | 2.76             | 2/3          | 2/1            | Toys/Books <sup>b</sup>            | 3.25             | 0/1          | 1/0            |
| Toys and Games                   | 3.00             | 3/4          | 3/0            | Furnishing/ Household <sup>b</sup> | 2.67             | 0/1          | 1/0            |
| Food                             | 3.06             | 4/1          | 1/0            | Toys/Outdoor <sup>b</sup>          | 3.53             | 1/1          | 1/0            |

<sup>a</sup> In the instances that there are more than four managers, the department had recently changed department manager. Shop assistants had the choice of rating the new or the previous manager.

<sup>b</sup> Some shop assistants and their managers worked on a combined department.

ticular masculine connotation. Please divide up the cards into these five boxes in such a way that the boxes 'typically masculine and typically feminine' both contain three cards, the boxes 'more or less masculine and feminine' contain four cards and the neutral box contains five cards. You may take as long as you want and switch the cards as often as you want until you are satisfied with the division'. Although most respondents showed some resistance and muttered when putting cards into the boxes (1) and (5), all of them succeeded in a fast rate and did not hesitate much. The average scores for each department are presented in Table 3.2. These average Q-sort scores were assigned to the departments in the subsequent analyses as a 'continuous' value for gender-typing of the context. In some stores, two departments were combined to one. The combinations were toys/books, toys/outdoor equipment, and furnishing/household. These combined departments were allocated the average Q-sort score of the separate departments.

Table 3.2 also shows the number of male and female managers that were rated in the sample and the number of male and female shop assistants that rated managers for the different department. As may be expected, the feminine-typed departments employ relatively more female subordinates and female managers, whereas the masculine-typed departments employ relatively more male subordinates and male managers. Not surprisingly, the average score of the Q-sort method correlated with the sex-composition of the raters of a manager ( $r = .48, p < .001$ ) and manager sex ( $r = .51, p < .01$ )<sup>4</sup>.

*Leadership styles.* Shop assistants were requested to give their impression of the lead-

<sup>4</sup> Although it would have been possible to use the sex-composition of the raters as a measure for gender-typing of the context, the average Q-sort score was preferred, since the disappointing response



ership styles of their department manager on 40 Likert-typed items representing four leadership scales. The items of the four scales were presented in random order. People-oriented (16 items) and task-oriented leadership (10 items) were measured by the Dutch translation and revision (Syroit, 1978) of the Supervisory Behavior Description Questionnaire (SBDQ), Fleishman, 1953). Charismatic leadership was measured by seven slightly revised items of the transformational leadership scale of the Dutch translation and standardization (Den Hartog, Van Muijen & Koopman, 1994) of the Multifactor Leadership Questionnaire (MLQ, Bass & Avolio, 1989). Furthermore, seven items were developed by the researcher, which measured whether managers were oriented towards empowering their personnel.

Each item was formulated as a statement with a Likert-type response format ranging from 'totally disagree' (1) to 'totally agree' (7). This is the usual format of the SBDQ. In the MLQ (both English and Dutch version) the answers of the 7-point scales are 'never' (1) to 'always' (7). The wording of the original items of the MLQ and SBDQ were further altered in several respects. First, in the original questionnaires respondents were asked to rate how their manager 'treats his/her personnel' which is rather indefinite. By replacing the distant 'treats his/ her subordinates' by 'treats me', the items may have more personal relevance for respondents. Furthermore, this wording implies that a manager may treat each shop assistant differentially. The second changing of the wording of the original items involved slight changes to fit the questionnaire to the department store context (see for instance items 13, 20, 32 and 36 and the use of 'department manager' instead of 'manager'). Finally, some of the original items that were multidimensional (for instance 'my manager is friendly and easy to approach'), were split into single dimension items. The items of the four leadership style instruments are presented in Appendix 3.1A, 3.1.B. and 3.1.C.

*Satisfaction with the manager.* Thirteen items were constructed that measured the satisfaction of the shop assistants with several job-related issues. Each item was formulated as a statement with a Likert-type response format from 'totally disagree' (1) to 'totally agree' (7). Principal Factor Analysis revealed three factors (explained variance 60%). Items and factor loadings are presented in Appendix 3.1.C. The first factor that was found represents shop assistant's satisfaction with their manager. The content of item 5 did not match the content of other items of this scale. Reliability analysis also showed that the deletion of this item slightly improved the internal consistency (from  $\alpha = .84$ , to  $\alpha = .85$ ). For these two reasons item 5 was removed from the scale. The other two factors concerned the shop assistants satisfaction with their own work; and their feeling of incompetence, or incapability to cope with the responsibilities of the work. As these scales did not concern the evaluation of the manager, these scales will not be used in the subsequent chapters.

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rate makes sex-composition a less reliable estimate. Moreover, the Q-sort method captures peoples' generalized ideas about the 'masculinity' or 'femininity' of certain contexts and therefore conceptually connects to gender-typing better than a numerically based instrument.



Table 3.3.A

Mean, Standard Deviation, Crohnbachis alpha, Spearman-Brown split-half, Skewness and Kurtosis for: Leadership Styles, Satisfaction, and Gender-Identity.

|                                | n items | Mean (stddev) | $\alpha$ | Split-half | Skewness | Kurtosis |
|--------------------------------|---------|---------------|----------|------------|----------|----------|
| Leadership styles <sup>a</sup> |         |               |          |            |          |          |
| People-oriented leadership     | 16      | 4.54 (1.25)   | .92      | .91        | -.49     | -.51     |
| Task-oriented leadership       | 10      | 4.03 (1.08)   | .81      | .77        | -.05     | -.49     |
| Charisma                       | 7       | 4.60 (1.41)   | .88      | .86        | -.59     | -.45     |
| Empowerment                    | 7       | 4.95 (1.25)   | .83      | .79        | -.82     | .43      |
| Satisfaction <sup>a</sup>      |         |               |          |            |          |          |
| Satisfaction with manager      | 4       | 4.83 (1.63)   | .86      | .87        | -.79     | -.30     |
| Gender-identity <sup>b</sup>   |         |               |          |            |          |          |
| Masculinity                    | 15      | 3.27 (.52)    | .71      | .70        | -.79     | 1.79*    |
| Femininity                     | 15      | 3.08 (.59)    | .79      | .80        | -.44     | .41      |

Note. \*  $p < .05$ .

<sup>a</sup> values range from 1 (totally disagree) to 7 (totally agree), <sup>b</sup> values range from 1 (not at all) to 5 (very much)

*Gender Identity.* Gender identity was measured by the trait list (15 masculine-typed and 15 feminine-typed items) of the Gender Identity Questionnaire (Willemssen & Fischer, 1999). Shop assistants were asked to indicate on a 5-point Likert-type scale whether the alphabetically listed personality traits characterized their manager (1 = 'not at all', 5 = 'very much so', items presented in Appendix 3.1.D). In the instruction of the questionnaires distributed in the first department store under study respondents were told to think of their managers' personality traits *in the context of work*. The latter part of this instruction gave rise to so many spontaneous remarks that it was decided to remove 'in the context of work'. Similarly, the item 'romantic' was replaced by 'social', as many respondents did not fill out this item and remarked that they 'did not know whether they are romantic or not'.

*Individuating information.* In Chapter 4 it is hypothesized that individuating information may influence the perception of male and female managers. Although no direct measure of individuating information was recorded, the number of work hours of a shop assistant can be considered an adequate measure. Shop assistants who work long hours will have more opportunity to observe their manager than shop assistants working in small part-time jobs<sup>5</sup>.

### Statistical Properties of the Questionnaire Scales

Non-systematic missing values on the items that make up the scales for the measurement of leadership styles, satisfaction with the manager, and masculinity and femi-

<sup>5</sup> Work hours correlated with other measures that may also contribute to more elaborate perceptions of a manager, such as type of contract (on a scale of temporary to permanent,  $r = .33, p < .001$ ), and experience ( $r = .38, p < .001$ ). As the latter two variables had more missing data than work hours did, work hours was also a more practical instrument for individuating information.

ninity were replaced by regression estimates with added error components (Little & Rubin, 1990; Vermunt & Bernaards, 1998). The criterion variables were: (a) scores on the other items of a scale, and (b) background variables of the respondent (age, sex, educational level, experience, nationality, working hours, type of contract, the department of the respondent, manager sex and location of the department store).

Table 3.3.A. presents the means and standard deviations, the internal consistency, split-half reliability, skewness and kurtosis of all rating instruments. In general, the scales were normally distributed and their average scores approached the scale means. The managers were generally rated somewhat more masculine, more people-oriented, more charismatic and more empowering than the scale mean, and shop assistants were ‘above average’ satisfied with their manager, but the skewness and kurtosis tests were not significant. The exception was masculinity; the scale was skewed towards the masculine side.

Table 3.3.B  
*Correlations between Leadership Styles, Masculinity, Femininity and Satisfaction with the Manager.*

|                 | Task-oriented | People-oriented | Charisma | Empowerment | Masculinity | Femininity |
|-----------------|---------------|-----------------|----------|-------------|-------------|------------|
| Task-oriented   |               |                 |          |             |             |            |
| People-oriented | .10           |                 |          |             |             |            |
| Charisma        | .22***        | .84***          |          |             |             |            |
| Empowerment     | -.10*         | .81**           | .73***   |             |             |            |
| Masculinity     | .17**         | .40***          | .49***   | .33***      |             |            |
| Femininity      | .05           | .61***          | .54***   | .50***      | .50***      |            |
| Satisfaction    | -.05          | .75***          | .78***   | .70***      | .49***      | .59***     |

Table 3.3.B. presents the correlations between the different scales. Not surprisingly, the stereotypically feminine typed scales correlate positively with each other. However, task-oriented leadership also correlated positively with charisma, but negatively with empowerment, although the correlations were not particularly high. As could be expected, task-oriented leadership and people-oriented leadership were orthogonal ( $r = .10, p < .08$ ). Furthermore, all leadership scales, except for task-oriented leadership also correlated with the scales for gender identity.

*Manager Effectiveness: Departmental Performance Outcomes*

The following departmental outcomes were gathered that can be regarded as objective measures of department/manager performance: (a) customer satisfaction, (b) turnover (sales figures), and (c) sick-leave costs. The first index of performance (a) is the quarterly customer satisfaction score that was based on anonymous client surveys (customer service index = 100). The second index (b) is the turnover in the month of the investigation, as compared to the planned turnover for this month (turnover index = 100). The sick-leave costs present the monthly percentage of the departmental budget

that is spent on illness absence. It should be noted, however, that this figure is 'polluted' with pregnancy leave, which unfortunately could not be traced.

### 3.3 Statistical Analyses

In the present study the data are measured at different so-called hierarchical levels. At the shop assistant level (Level-1), the variables that were measured were (among others) shop assistant sex, work hours, shop assistants rating of the manager's leadership styles, their satisfaction with the manager, and their rating of a manager's gender identity. At the department level (Level-2) the variables that were measured were sex of the manager and the gender-typing of the department. Finally, the departments all recede under one of four stores (Level-3). The Level-1 data are 'nested' within the higher Level-2 units, which in turn are nested in the highest Level-3 units. Traditional approaches to analyzing hierarchical data include: (a) aggregation; data measured at the lower levels are aggregated or averaged and subsequently analyzed at the higher level; (b) disaggregation; variables measured at higher level units are assigned to each lower level unit; (c) fitting separate regression models for the data within the higher level units. These methods have many drawbacks, both methodological and statistical, and are therefore not satisfying (see Kreft & De Leeuw, 1998).

#### *Multilevel Random Coefficient Models*

Multilevel analysis present a so-called Multilevel Random Coefficients Model (MCRM) where a maximum of information is used by fitting an integral model to all Level-1 data, at the same time incorporating variables measured at higher levels of aggregation. Furthermore, the estimation of large numbers of regression coefficients (as would be the case when fitting separate regression models for each higher level unit, as for instance in ANCOVA) is replaced by the assumption of a distribution for these parameters (over all higher level units). Instead, the parameters of this distribution are estimated, that is, the variance components and a structure for the means contained in the regression coefficients. Altogether, this makes the multilevel model more parsimonious than a number of separate models within higher level units, and more informative and statistically more adequate than one single model for the aggregated data, or one single model for the complete data set, ignoring the nested structure.

Conceptually, a multilevel model comprises separate models for each level in the data. Thus, in the present study one can distinguish between a Level-1 model at the shop assistant level, a Level-2 model at the department/manager level and a Level-3 model at the department store level. Actually, the idea of separate models for each level can be considered an alternative perspective from which the nested structure is treated. It can be viewed as if at Level-1 each department is allowed to have its own linear regression model with its own set of parameters (regression coefficients). At the department/manager level (Level-2) the variation among all the department models is modeled over departments.

A simple example will illustrate the approach. Suppose one studies the effect of



two predictor variables, sex of the shop assistant and gender-type of the department, on leadership style, for all the departments within one department store. This yields a two-level structure. Then, for each department  $j$ , the Level-1 model is:

$$(\text{LEADERSHIP STYLE})_{ij} = \beta_{0j} + \beta_{1j} (\text{SHOP ASSISTANT SEX})_{ij} + e_{ij}, \quad (3.1)$$

where the indices  $ij$  refer to the scores of shop assistant  $i$  in department  $j$  on the dependent variable (LEADERSHIP STYLE) and the (Level-1) predictor variable shop assistant sex (SHOP ASSISTANT SEX).  $\beta_{0j}$  and  $\beta_{1j}$  are department specific regression coefficients (intercept and slope) and the  $e_{ij}$  is a random error term.

At level-2, the department level, the model is given by

$$\begin{aligned} \beta_{0j} &= \gamma_{00} + \gamma_{01} (\text{GENDER-TYPE DEPARTMENT})_j + u_{0j} \\ \beta_{1j} &= \gamma_{10} + \gamma_{11} (\text{GENDER-TYPE DEPARTMENT})_j + u_{1j}, \end{aligned} \quad (3.2)$$

in which  $(\text{GENDER-TYPE DEPARTMENT})_j$  stands for the score on the Level-2 predictor variable gender-type of the department  $j$ , the parameters  $\gamma_{00}$ ,  $\gamma_{01}$ ,  $\gamma_{10}$  and  $\gamma_{11}$  are regression coefficients and  $u_{0j}$  and  $u_{1j}$  are random error terms.

Clearly, equation (3.1) specifies a separate regression model for each department  $j$  with the same predictor variable, but with a different set of regression coefficients. These coefficients can vary across departments (Level-2 units) as expressed in equation (3.2), where they are treated as random variables. Moreover, part of this variation may be explained by the Level-2 variable GENDER-TYPE DEPARTMENT.

Equations (3.1) and (3.2) suggest a two-step procedure because it seems as if the Level-1 regression coefficients are regressed on the Level-2 predictor variables. However, the Level-1 and Level-2 models are only conceptually specified separately. The essential part of multilevel analysis is that the model that is obtained from substituting equation (3.2) into 3.1, is considered, which is written as

$$\begin{aligned} (\text{LEADERSHIP STYLE})_{ij} = & \gamma_{00} + \gamma_{10} (\text{SHOP ASSISTANT SEX})_{ij} + \gamma_{01} (\text{GENDER-TYPE DEPARTMENT})_j + \\ & \gamma_{11} (\text{GENDER-TYPE DEPARTMENT})_j * (\text{SHOP ASSISTANT SEX})_{ij} + \\ & u_{0j} + u_{1j} (\text{SHOP ASSISTANT SEX})_{ij} + e_{ij}. \end{aligned} \quad (3.3)$$

Equation (3.3) shows a model for which two sets of parameters have to be estimated: a set of fixed regression coefficients, the  $\gamma$ s, and a set of variance components associated with the complicated error term. The part of the model containing the  $\gamma$ s is called the *Fixed Part*. It is similar to the usual regression model, except that it contains predictor variables as measured at both levels. Furthermore, it contains an additional interaction variable between Level-1 and Level-2, that is  $(\text{GENDER-TYPE DEPARTMENT})_j * (\text{SHOP ASSISTANT SEX})_{ij}$ . This commonly called cross-level interaction term  $\gamma_{11}$ , can be of most

interest because it reflects the influence GENDER-TYPE DEPARTMENT has on the effect of SHOP ASSISTANT SEX on LEADERSHIP STYLE.

The extended error term, containing  $u_{0i}$ ,  $u_{1i}$  and  $e_{ij}$  is called the *Random Part* of the model. It is complicated because it contains error terms of both levels. The usual assumptions apply; i.e. Level-1 and Level-2 error terms are independently identically distributed following normal distributions with means zero. At Level-1 there is only one error term ( $e_{ij}$ ) with one distribution yielding one variance component  $\sigma^2$ . At Level-2 however, the example includes two error terms ( $u_{0i}$  and  $u_{1i}$ ) following a joint normal distribution yielding two variance components,  $\tau_{0i}^2$  and  $\tau_{1i}^2$ , and a covariance term  $\tau_{01i}$ . The estimated variance component  $\tau_{0i}^2$  reflects the intercept variance, that is, the variance of the intercepts in the Level-1 models across all departments. The estimated variance component  $\tau_{1i}^2$ , reflects the slope variance regarding the regression coefficient (slope) of the Level-1 predictor variable SHOP ASSISTANT SEX across all departments. In the example both variance estimates are conditional, because part of the variance may be explained by the Level-2 predictor variable GENDER-TYPE DEPARTMENT. Finally, the estimated covariance term  $\tau_{01i}$  denotes the covariance between intercepts and slopes across all department models. Obviously, adding Level-1 predictor variables to the model, and treating their slopes as random variables at Level-2, leads to additional variance components and covariance terms. Intercept and slope(s) may be modeled differently, for instance, the intercept can be random, while slopes can be fixed, or a Level-2 predictor variable can only apply to a slope and not to the intercept.

#### *Shop Assistants, Managers and Stores: Steps in Three-level Hypothesis Testing*

Basically, multilevel analysis deals with hierarchical data by modeling the so-called intraclass correlation which (may) arise(s) from the nested structure. Intraclass correlation can be conceived as the degree to which the individual observations are dependent. In a two-level model, the intraclass correlation is defined as  $\tau^2 / (\tau^2 + \sigma^2)$ . The nesting of individual observations within higher level units is likely to cause dependency among observations within the same unit. In the present study, modeling the intraclass correlation is inescapable for two reasons. First, shop assistants in the same department, working under the same manager, are more alike than shop assistants in different departments, due to the shared context of the department. Second, shop assistants also 'share' their particular manager, which makes dependencies in the data even more prominent and the necessity of applying multilevel analysis more pressing.

In general, the presence of intraclass correlation violates the assumption of independent observations in the traditional linear (regression) model. As a result, the error variance is affected and the model fails because estimation of standard errors becomes unreliable. Barcikowski (1981) demonstrated that even small intra-class correlations inflate the alpha level to a large extent, especially with larger sample sizes (for instance, when the intra-class correlation is only .05, an alpha level of .05 inflates to .43 with a sample size of  $N=100$ ).

Multilevel models deal with intraclass correlation by modeling the error term. At the same time, standard errors are adjusted. Consequently, multilevel models can be viewed as regression models in which the nested structure of the data is modeled in a complicated error term. Technically, the intraclass correlation is estimated as the proportion of the variance in the dependent variable that is between the higher level units.

In the present study there are three levels, 327 shop assistants are nested within 70 departments and departments are nested within four department stores. The hierarchical structure of the error term is apparent from the simple three-level intercept-only model:

$$(\text{CRITERION VARIABLE})_{ijk} = \gamma_{000} + \nu_{00k} + \mu_{0jk} + e_{ijk}, \quad (3.4)$$

in which  $\gamma_{000}$  is the predicted grand mean,  $\nu_{00k}$  is the deviation of Level-3 unit  $k$  (in our case stores) from the grand mean,  $\mu_{0jk}$  is the Level-2 (departments) unit  $j$  specific deviation of the Level-2 mean from the Level-3 mean, and  $e_{ijk}$  is the Level-1 (shop assistants) unit  $i$  deviation of the Level-1 means from the Level-2 mean (the 'residual'). The error terms  $\nu_{00k}$ ,  $\mu_{0jk}$  and  $e_{ijk}$  are assumed to be independently identically distributed following normal distributions with means zero and variances  $\eta^2$ ,  $\varpi^2$  and  $\sigma^2$ , respectively. In a three-level model, the definition of the intra-class correlation is less clear than in a two-level model. In fact, there are a number of possible intraclass correlations: (1)  $\varpi^2 / (\eta^2 + \varpi^2 + \sigma^2)$ , (2)  $\eta^2 / (\eta^2 + \varpi^2 + \sigma^2)$ , (3)  $\sigma^2 / (\varpi^2 + \sigma^2)$ , thus ignoring the third level, and (4)  $\eta^2 / (\eta^2 + \sigma^2)$ , ignoring the second level.

However, in the present study there were only four Level-3 observations, therefore it makes no sense to estimate the variance over department stores. This would require at least twenty-five units of observation (cf. Busing, 1993). As a consequence, the study cannot be treated as a 'full' three-level model, with random components at all levels. As we did not want to ignore the third level all together, we opted for a 'conditional three-level model'. This is accomplished by modeling the predicted grand mean. In Formula (3.4)  $\gamma_{000} + \nu_{00k}$  is replaced by  $\gamma_{00k}$ :

$$(\text{CRITERION VARIABLE})_{ijk} = \gamma_{00k} + \mu_{0jk} + e_{ijk}, \quad (3.5),$$

and

$$\gamma_{00k} = d_{000} + d_{001} (\text{NIJMEGEN}) + d_{002} (\text{THE HAGUE}) + d_{003} (\text{TILBURG}), \quad (3.6)$$

in which NIJMEGEN, THE HAGUE and TILBURG are dummy variables indicating the cities where the department stores are located. The  $d$ s represent the estimated departures from the 'baseline' store in the city Rotterdam. Doing so, the two-level model estimation is made conditional to the Level-3  $k$  specific means<sup>6</sup>. Substituting (3.6) in (3.5) results in

<sup>6</sup> Although this model appears similar to a two-level model with three dummy-coded covariates, it is actually a three-level model since the algorithm of the MLn software includes the third level in its iterations.



the 'three-level conditional-intercept-model':

$$(\text{CRITERION VARIABLE})_{ijk} = d_{000} + d_{001}(\text{NIJMEGEN}) + d_{002}(\text{THE HAGUE}) + d_{003}(\text{TILBURG}) + u_{0jk} + e_{ijk}, \quad (3.7)$$

Now the proportion of the total variance that is between the Level-2 units (departments) is 'corrected' for the Level-3, store-specific deviations from the grand mean, resulting in a 'conditional intra-class correlation'.

The models to be estimated in Chapters 4 and 5 are built upon this conditional-intercept model. Estimating a 'base-line' model has the advantage that subsequent models that add predictor variables can be tested for significance in a Chi-squared distribution of the difference in deviance ( $-2 \log$  likelihood) of the new model compared to the base-line model, with the number of added parameters as degrees of freedom. This test is called the 'deviance test', or 'likelihood-ratio test'. It is used, first of all, for testing the significance of the random part of models. The distribution of variance components severely skewed, especially in small samples, and commonly used *t*-ratio's can not be applied. The deviance test may also be used to test the fit of multi-parameter models.

The hypotheses in the present study are merely concerned with the fixed parameters in the model, i.e. the effect of the different predictor variables and their interactions. These parameters can be tested using the familiar *t*-ratio. Thus, the estimated variance components will not play a role in the interpretation of effects. However, as indicated above, the adequate modeling of the random part of the model substantially improves the quality of standard error estimation of the fixed parameters which makes testing more reliable (for a comprehensive discussion of hypothesis testing concerning multilevel models, see Bryk and Raudenbush 1992, pp. 48-56, Snijders & Bosker, 1999, pp.86-98).

Models were fitted using Mln (Rasbash, Yang, Woodhouse & Goldstein, 1995), one of the major packages developed for multilevel analysis. The method of estimation was iterative generalized least squared (IGLS). If normality assumptions are met, this method is equivalent to full information maximum likelihood (FIML).

A final note is needed here on the treatment of the performance outcome measures for each department. Turnover, customer satisfaction and sick-leave costs are not measured at the shop assistant level but at the department level. Hence, there are only 70 observations of these outcome criteria. In other words, this data show a two-level structure only: there are 70 Level-1 units, i.e. departments, and only four Level-2 units, i.e. stores. The need for MCRM models is thereby cancelled and Ordinary Least Squares regression models suffice. The impact of the four stores can be accounted for by dummy-coding for the four stores according to the usual OLS regression and ANCOVA procedures. The predictors that were measured at the shop assistant level, i.e. leadership style, gender identity and shop assistant sex, will be aggregated over the departments. For every manager, an average rating of leadership styles is calculated.

## Chapter 4

### Leadership Styles in Gendered Contexts\*

\* Parts of this chapter will appear/ed in:

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In this Chapter subordinates' perceptions of leadership styles of male and female managers are investigated. First of all, it is studied whether male and female managers differ in their leadership styles. The second research question concerns the moderating influence of the gender-type of the immediate work contexts on the behavior of male and female managers. Third, the question that is addressed is whether stereotypes influence the perception of leadership styles, especially when raters have limited individuating information about their manager. Finally, the relationship between leadership styles and the perceived gender identity of a manager is explored.

#### 4.1 Introduction

One of the explanations offered for the slow advancement of women in leadership positions, especially in the higher regions of organizations, is that women lack the appropriate leadership style. Female leaders in male-dominated environments are expected to use leadership styles that suit the 'men's world' in order to maintain their status. So-called 'masculine modes of management' (Loden, 1985) are characterized by competitiveness, hierarchical authority and emphasis on control. Not surprisingly, these qualities are almost synonymous with characteristics considered typical for men (Broverman, Vogel, Broverman, Clarkson & Rosenkrantz, 1972; Deaux & Lewis, 1984). Schein and her colleagues (Brenner, Tomkiewicz & Schein, 1989; Schein, 1973; Schein & Mueller, 1992; Schein, Mueller, & Jacobson, 1989) have shown that successful managers are indeed perceived to be similar to men and not to women, despite celebrations of so-called 'feminine modes of management' (Loden, 1985; Peters, 1990). At the same time, female managers face normative pressures to behave 'feminine' (Chapter 1; Cialdini & Trost, 1998; Eagly, Wood & Diekmann, 2000). Various authors suggest that the balancing this requires can have repercussion on the well-being of female managers (Gardiner & Tiggemann, 1999) and makes it harder for women to reach the top (Kanter, 1977; Powell, 1988).

Although people expect male and female managers to draw from different leadership behaviors, the evidence that men and women actually engage in different leadership styles is less clear. Meta-analyses and reviews of sex differences in leadership styles generally report negligible or small differences (Butterfield & Grinnell, 1999; Dobbins & Platz, 1986; Eagly & Johnson, 1990; Klenke, 1993; Vinkenburch, Jansen, & Koopman, 2000). In our own meta-analysis on sex differences in leadership styles of studies that appeared between 1987 and 1999 (Chapter 2) it was found that overall, sex differences are small, but in the predicted stereotypical direction. Female leaders are somewhat more transformational and more democratic than male leaders, whereas male leaders are more transactional than female leaders. No evidence for sex differences was found on people-oriented and task-oriented leadership styles, although the tendencies were in the expected stereotypical direction. In a meta-analysis of studies that appeared between 1961 and 1987 by Eagly and Johnson (1990), female leaders were found to be more democratic and somewhat more people-oriented and task-oriented than male leaders. In



a meta-analysis of 46 studies assessing (sub-scales of) transformational and transactional leadership styles, Eagly, Johannesen-Schmidt, Van Engen and Vinkenburger (in preparation), found that women, compared to men, showed greater use of transformational styles (especially individualized consideration) and the transactional style of contingent reward. Male leaders, compared to female leader, showed greater use of the transactional styles active and passive management by exception, and greater use of a laissez-faire style.

In the present study, it is investigated whether male and female managers leading departments in department stores of a large retail organization differ in people-oriented, task-oriented, charismatic and empowerment leadership styles. From Chapter 2 it can be deduced that in business settings leadership styles are somewhat more in a stereotypical direction than in general. It is therefore expected that female managers, in comparison with male managers will exhibit more stereotypically feminine leadership styles and fewer stereotypically masculine leadership styles. More specifically, it is hypothesized that female managers, use people-oriented, charismatic and empowering leadership more than male managers, whereas male managers use task-oriented leadership more than female managers (Hypothesis 1).

#### *Context as a Moderator of Sex Differences*

There is ample evidence that several factors in the organizational context moderate the emergence and direction of gender differences in leadership behavior (Chapter 2; Eagly, Johannesen-Schmidt, Van Engen & Vinkenburger, in preparation; Eagly & Johnson, 1990). A major contextual factor put forward by these authors is the sex-composition in organizations. Eagly and Johnson (1990) reported that the magnitude of sex differences relates to the percentage of men among the people whose style is assessed. Differences between male and female managers in democratic and people-oriented styles are significantly smaller in male-dominated management layers than in female-dominated layers. However, in Chapter 2 it turned out that female managers are relatively more transformational when there are more men among the leaders whose style is assessed. The sex-composition of the subordinate team is also of some importance: male managers act more task-oriented and more autocratic, but also more people-oriented among male subordinates (Eagly & Johnson, 1990).

Although the results are not always consistently in the same (stereotypical) direction, both male and female managers seem to be sensitive to the sex-composition in their surroundings, using leadership styles that match the gender-typing of the context. According to Eagly and Johnson (1990), 'the sex of the subordinates *may affect the behavior of leaders of both sexes more than it affects sex differences*' p 246 [italics added]. Results from a related area of research, namely influence strategies, support this idea of the importance of the sex-composition of the immediate context. Carli (1989), for instance, found that subjects used more aggressive and direct styles of influence when dealing with men than when dealing with women. Similarly, in a field study among participants in a meeting, Van Engen, Van Knippenberg, and Willemssen (1996) reported that

both male and female participants used more stereotypical masculine influence styles in male-dominated meetings than in female-dominated meetings.

Obviously, the male or female domination of an organizational context influences the styles of both male and female managers. Surprisingly, this aspect is often left out of consideration. Druskat (1994), for example, found large differences between male and female leaders of religious orders. Followers of female leaders rated their leaders as more transformational and less transactional, than followers of male leaders. However, the female leaders lead all-female religious orders and the male leaders lead all-male orders. As a result, the sex of the leader was confounded both with the sex of the respondents and with the male- or female-domination of the context.

The impact of sex-composition of the organizational context on sex differences in leader behavior was the explicit subject of a recent study by Gardiner and Tiggemann (1999). They studied 60 female and 60 male managers in several male-dominated and female-dominated industries. Female managers appeared to be more task-oriented in male-dominated contexts and more people-oriented in feminine contexts than male managers. Thus, an interaction was found between sex of the manager and gender-typing of the context. The asymmetry implies that female managers use leadership styles congruent with the surrounding context. Gardiner and Tiggemann studied male-dominated contexts including the automotive industry, the timber industry, academia, consultancies, and accounting. Female-dominated contexts included hairdressing, nursing, and early childhood education. Their sampling procedure however, may have an important drawback. Due to the large variety in female- and male-dominated contexts sex-composition is probably confounded with other contextual variables, such as organizational size and structure, company policy, and corporate mission. It is at least questionable whether a manager of a hairdressing salon, or a principal of a nursery school, can be compared to a senior consultant in a large accounting or IT firm. As a result, Gardiner and Tiggemann's results concerning the effects of gender-typed context on leadership styles may be confounded with other organizational context effects.

The present study uses a quasi-experimental approach to study the impact of gender-type of the context upon leadership styles. As many organizational variables as possible were kept constant, except for gender-typing of the context. This was achieved in a natural way by studying a single retail organization that administers a chain of department stores. Department stores accommodate both 'masculine-typed' and 'feminine-typed' departments, which are similar in most other organizational respects. Electronics, sports, and hi-fi departments sell products with a 'masculine' connotation, and are led mostly by male sales managers. In these departments the majority of shop assistants is male. The 'feminine-typed' departments, such as women's ' fashion, cosmetics, and lingerie, represent the other end of the spectrum (see Chapter 3).

It is hypothesized that gender-type of the organizational context affects leadership behavior. Managers will use a leadership style that is congruent with the gender-typing of the immediate work context (Hypothesis 2). More precisely, it is predicted that, to



the degree that a department is more feminine-typed, male and female managers will show more people-oriented, empowering, and charismatic leadership styles and are less task-oriented. When a department is more masculine-typed, it is expected that male and female managers show more task-oriented leadership and show less people-oriented, empowering and charismatic leader behavior.

Additionally, it is explored whether the sex of the rater influences the ratings of leadership styles. Some studies report that female raters give higher ratings in general (e.g. Bass, Avolio & Atwater, 1996; see also Chapter 2). Also, it is explored whether sex of the rater moderates the effects of manager sex and gender-typing of the organizational context. As was discussed in Chapter 2, male and female managers tend to treat their male or female subordinates differently. The direction and magnitude of this effect is, however, not consistent. We will therefore further explore the possible moderating effect of rater sex on leadership styles.

#### *The Influence of Stereotypes on the Perception of Leadership Styles*

Although in general it is expected that managers adapt their behavior to the situation, acting more 'feminine' in a female-dominated setting and acting more 'masculine' in a male-dominated setting, different results may arise if raters have limited contact with their manager. Subordinate descriptions of manager behavior are usually accurate, even more accurate than self-reported managerial behavior (Konst, 1998; Korabik, Baril & Watson, 1993). However, in the case where accurate individuating information is limited, category-based information is likely to infect perception (Fiske & Neuberg, 1990; Lord & Maher, 1993; Vonk & Ellemers, 1993). Observers, who do not know their leader well, will compensate for their lack of accurate information by using available cues to infer their judgments, such as stereotypes.

Stereotypes that are likely to influence judgments of managers are gender stereotypes and stereotypes of managers. Sex of a person is a highly visible and salient category and the primary criterion on which initial judgments are based (Fiske, Haslam & Fiske, 1991; Stangor, Lynch, Duan & Glass, 1992; Van Knippenberg, 1992; Van Knippenberg, Van Twuyver & Pepels, 1994). For example, women are expected to be more communal and men to be more agentic (Broverman et al, 1972; Deaux et al, 1984; Williams & Best, 1990). Leader stereotypes are also likely to influence perceptions (Lord & Maher, 1990). Schein and her colleagues (Schein, 1973; 1975; Brenner, Tomkiewicz & Schein, 1989; Schein, Mueller & Jacobson, 1989; Schein & Mueller, 1992; Schein, Mueller, Lituchy & Liu, 1996) showed that stereotypes of managers are very similar to those of men. However, there are differences in stereotypes for male and female managers. Russell, Rush and Herd (1988) asked female respondents to describe what behavior would be associated with an effective male and female leader. Respondents rated effective female leaders as more people-oriented and task-oriented than effective male leaders. Similarly, Maher (1997) found that male and female respondents thought that a typical female leader was more transformational and transactional



than a typical male leader. The same respondents were asked to describe the behavior of their current supervisor as well. No evidence for differences in actual behavior of their male and female supervisors was found. Moreover, Maher (1997) showed that there is little congruence between ratings of actual managers and stereotype ratings.

Thus, gender stereotypes are likely to bias the perception of male and female managers when the available information is limited. Without individuating information, perceptions of men and women are assimilated to their respective gender stereotypes (Nelson, Acker & Manis, 1996; Vonk & Ellemers, 1993). Given time, the initial perceptions that are formed on the basis of gender stereotypes are likely to be revised. Accordingly, we expect more stereotypical sex differences in the perception of leader behavior by subordinates who have little individuated information on their manager than those who know their manager well.

Furthermore, the perceptions of naive perceivers may also be influenced by situational cues, such as the gender-typing of the department. For instance, a female manager working at an electronic equipment department may be considered a-typical and her inferred behavior as well. Similarly, a male manager leading the baby clothes department may be considered especially feminine. Consequently, inferences on leadership styles would reflect this a-typicality which leads to contrast-effects in behavioral judgements. The gender-role incongruent context in which a manager works invokes judgments that contrast gender stereotypes (Vonk & Ellemers, 1993).

In sum, it is hypothesized that subordinates with limited access to individuating information form an impression of their manager by means of the available cues they have – in our case, a manager's sex and the gender-typing of the context. This leads to either an assimilation effect on the judgments of the manager's behavior in gender-role congruent contexts, or to a contrast effect in gender-role incongruent contexts. Thus, relative to shop assistants who know their manager well, for shop assistants who have limited individuating information the following effects are predicted. In gender-role congruent contexts, judgments will be assimilated to gender stereotypes. In comparison with raters who know their manager well, raters with limited individuating information will perceive female managers leading a feminine-typed department as more people-oriented, more empowering, more charismatic and less task-oriented; male managers leading a masculine-typed department will be perceived to be more task-oriented, less people-oriented, less empowering and less charismatic (Hypothesis 3a). In gender-role incongruent contexts, judgments by raters that have little individuating information will be contrasted to gender stereotypes, resulting in gender-a-typical judgments. Thus, male managers leading feminine-typed departments will be rated more people-oriented, more empowering, more charismatic and less task-oriented, whereas female managers leading masculine-typed departments will be rated more task-oriented and less people-oriented, less charismatic and less empowering (Hypothesis 3b).

*Gender Identity and Leadership Styles.*

As was discussed in Chapter 2, leadership styles have a gendered connotation because the characteristics of leadership styles reflect the femininity-masculinity, or instrumentality-expressiveness dimension. It is often argued (Bales, 1950; Stogdill, 1974; Powell, 1988) that the most effective managers combine both styles. In concordance with Bem's concept of psychological androgyny (1974) a manager combining both instrumental and expressive behaviors is called an androgynous manager (Sampson, 1977; Sargent, 1981). Bem's theory of psychological androgyny (1974) poses that femininity and masculinity do not form opposite ends of a continuum, but should be considered two separate dimensions. Masculine individuals show many instrumental but few expressive traits, feminine individuals show many expressive but few instrumental traits and androgynous individuals show equally many feminine and masculine traits. Likewise, managers may adopt a feminine, masculine, or androgynous style.

Furthermore, Bem (1974) argued that an individual's gender identity or social-role orientation is not necessarily related to biological sex. Both men and women can be either masculine, feminine, androgynous or neither. Korabik and Ayman (1987; 1994) argued that the same holds true for feminine- and masculine-typed leadership styles. In a series of laboratory studies (Korabik, 1982; Korabik & Caine, 1992) as well as field studies (Korabik & Ayman, 1987; 1994), Korabik and her colleagues found that leadership styles are better explained by a manager's identity in terms of masculinity, femininity or androgyny than by their biological sex. Inderlied and Powell (1979) found that in four samples of subjects with differing levels of managerial experience, masculinity was significantly correlated with task-oriented leadership and in two of the four samples, femininity correlated with a people-oriented leadership style. In short, manager's self-descriptions of their identity in terms of masculine and feminine traits relate to managerial behavioral styles, whereas biological sex hardly does so.

In these studies, a manager's gender identity was measured by self-ratings (usually the Bem Sex Role Inventory, BSRI, Bem, 1974). In the present study, a manager's gender identity is measured in a different way: respondents were asked to rate their manager in terms of masculine and feminine traits. In other words, subordinates of managers were asked to make dispositional inferences of their manager's identity. Since dispositional inferences are usually based on observed behavior (see for a review Gilbert, 1998), an association between leadership styles and gender identity can be expected. In a study on the relationship between perceived transformational leadership and perceived gender identity of bank managers, Kark and Shamir (2001) found that femininity related to transformational leadership. Hackman, Furniss, Hills and Paterson (1992) on the other hand, found that transformational leadership related to both masculinity and femininity. The latter study however, asked students to give their impressions of leaders of whom they had vivid recollections. These were not necessary leaders they had personal experience with. We have not been able to locate research that studied the relationship between people-oriented and task-oriented leadership styles and gender identity from a subordinate's perspective.



Apart from gender identity, a manager's biological sex may also influence the perception of leadership styles. As argued in the previous section of this chapter, stereotypical expectancies about the characteristics of men and women also influence person perception (e.g. Fiske et. al., 1991; Stangor et. al., 1992; Van Knippenberg, 1992; Van Knippenberg et. al., 1994). For the present study it is therefore expected that both a manager's sex and behavior contribute to descriptions of gender identity. It will be explored whether subordinates' ratings of a leader's gender identity are equally predictive of leadership behavior as self-ratings of gender identity, and we will study whether this relationship is moderated by the sex of the manager.

## 4.2 Method

Detailed information on the method and design of the study, more specifically on (a) characteristics of the organization and the respondents, (b) on (statistical) properties of the measurement instruments used, and (c) on the legitimization and explanation of the statistical analyses used in this Chapter, is presented in Chapter 3. In the following, a brief summary of the variables and methods of this chapter is given.

*Respondents and variables.* Respondents were 327 shop assistants (253 women and 74 men) working in four large department stores of one retail organization in the Netherlands. Every department store comprises of approximately 20 separate departments, such as the electronic equipment department, the furniture department, the lingerie department or the ladies fashion department. On the basis of a pilot-study, the departments were arranged along a continuum from very feminine-typed to very masculine-typed. The shop assistants described their department manager (40 men and 30 women) on 40 Likert-type items representing four leadership scales: (a) people-oriented leadership, (b) task-oriented leadership (c), charismatic leadership and (d) empowerment. Furthermore, shop assistants described their manager in terms of 15 feminine- and 15 masculine Likert-type items. Individuating information on a manager's behavior was measured by the (maximum number of) contact hours between managers and shop assistants, estimated as the working hours that shop assistants work.

*Statistical Analyses.* The present study demonstrates a hierarchical data structure with three levels: shop assistants (Level-1) are nested within departments (Level-2) and departments are nested within department stores (Level-3). Data were therefore analyzed using *Multilevel Random Coefficients Models*. Leadership styles, working hours and gender identity were measured at Level-1. Manager sex and gender-typing of a department were measured at Level-2. Four departments formed level-3.

## 4.3 Results

### *Preliminary Analyses*

To establish a baseline-model to which other models can be compared (see Chapter 3, statistical analysis), and to assess the strength of the hierarchical structure, two mod-



els were estimated: 1) the two level 'Intercept-Only' model, which divides the total variance in variance that is between departments (Level-2) and individual or residual variance (Level-1), and 2) the three-level 'Conditional-Intercept' model, that also divides the total variance in level-2 and level-1 variance but, in addition, models the mean effect of the four department stores in deviation of the grand mean. These two models can be written as

$$(\text{LEADERSHIP STYLE})_{ij} = d_{00} + u_{0j} + e_{ij} \quad (4.1)$$

and

$$(\text{LEADERSHIP STYLE})_{ijk} = \gamma_{00k} + u_{0jk} + e_{ijk} = d_{000} + d_{001}(\text{THE HAGUE}) + d_{002}(\text{NIJMEGEN}) + d_{003}(\text{TILBURG}) + u_{0jk} + e_{ijk}, \quad (4.2)$$

where the indices  $i$ ,  $j$ , and  $k$  refer to shop assistant  $i$  of department  $j$  in department store  $k$ . The parameter  $d_{00}$  represents the estimated grand mean. The parameter  $\gamma_{00k}$  represent the estimated grand mean of LEADERSHIP STYLE. The parameter  $d_{000}$  is the mean of the department store in the city of Rotterdam, which was chosen as the 'baseline store'. THE HAGUE, NIJMEGEN and TILBURG are the dummy variables indicating the other cities where department stores are located. The parameters  $d_{001}$ ,  $d_{002}$  and  $d_{003}$  represent the estimated departures from the 'baseline store' Rotterdam. The  $u_{0j}$ 's are the department specific deviations (of the department mean) from the grand mean, and the  $e_{ij}$ 's are the shop assistant specific deviations of the individual score from the department mean or grand mean (the 'residuals'). Table 4.1 presents the parameter estimates, the intra-class correlation  $\rho = \sigma_1^2 / (\sigma_1^2 + \sigma^2)$  and the deviance of the estimated models (4.1) and (4.2) for people-oriented, task-oriented, charismatic and empowerment leadership. The intra-class correlations for the three-level models are pooled over the four stores, resulting in a 'conditional' intra-class correlation.

A substantial proportion of the variance in the Intercept-Only model (4.1) of people-oriented leadership ( $\rho = .27$ ), task-oriented leadership ( $\rho = .13$ ), charismatic leadership ( $\rho = .24$ ) and empowerment ( $\rho = .23$ ) is between the higher level units.<sup>1</sup> However, a considerable proportion of this variance between departments can be attributed to differences between the stores. Adding the third level to the model results in significant decreases in the deviances of the models predicting people-oriented leadership ( $\chi^2 = 22.18$ ,  $p < .0001$ ), charismatic leadership ( $\chi^2 = 23.51$ ,  $p < .0001$ ), and empowerment ( $\chi^2 = 19.80$ ,  $p < .0005$ ). For task-oriented leadership however, the deviance did not decrease significantly ( $\chi^2 = 2.10$ ,  $p < .55$ ).

The proportion of variance that is between the departments in the three-level Conditional-Intercept model decreases to  $r = .14$  for people-oriented leadership,  $\rho = .11$  for task-oriented leadership, and  $\rho = .12$  for charismatic leadership and empowerment.

<sup>1</sup> See Chapter 3 for a discussion on the interpretation of the intra-class correlation.

Table 4.1

*Estimated Leadership Styles: Two-level-Intercept-Only model and Three-level Conditional-Intercept model.*

| Parameters                                    | Estimate (standard error) |                 |               |              |              |                 |              |                 |
|---|---------------------------|-----------------|---------------|--------------|--------------|-----------------|--------------|-----------------|
|   | People-oriented           |                 | Task-oriented |              | Charismatic  |                 | Empowerment  |                 |
|   | 2-Level                   | 3-Level         | 2-level       | 3-Level      | 2-Level      | 3-Level         | 2-level      | 3-Level         |
| <u>Fixed Parameters:</u>                      |                           |                 |               |              |              |                 |              |                 |
| - Intercept, $\gamma_{00}$                    | 4.608 (.106)              | 3.939 (.170)    | 4.020 (.078)  |              | 4.662 (.116) |                 | 5.038 (.102) | 4.457 (.163)    |
| - baseline ROTTERDAM $d_{000}$                |                           |                 |               | 4.005 (.148) |              | 3.873 (.186)    |              |                 |
| Store deviations from baseline:               |                           |                 |               |              |              |                 |              |                 |
| - THE HAGUE, $d_{001}$                        |                           | .843 (.262)**   |               | .117 (.232)  |              | 1.143 (.290)*** |              | .641 (.256)*    |
| - NIJMEGEN, $d_{002}$                         |                           | 1.264 (.243)*** |               | -.166 (.213) |              | 1.363 (.267)*** |              | 1.171 (.235)*** |
| - TILBURG, $d_{003}$                          |                           | .594 (.228)**   |               | .114 (.199)  |              | .743 (.250)**   |              | .483 (.220)*    |
| <u>Variance Components:</u>                   |                           |                 |               |              |              |                 |              |                 |
| Department variance:                          |                           |                 |               |              |              |                 |              |                 |
| - (conditional) intercept, $\omega_0^2$       | .431 (.128)               | .195 (.082)     | .154 (.068)   | .129 (.062)  | .489 (.154)  | .215 (.098)     | .367 (.117)  | .159 (.076)     |
| Shop assistant variance (Level-1):            |                           |                 |               |              |              |                 |              |                 |
| - residual, $\sigma^2$                        | 1.152 (.100)              | 1.167 (.101)    | 1.005 (.086)  | 1.012 (.087) | 1.511 (.131) | 1.517 (.130)    | 1.200 (.104) | 1.218 (.105)    |
| (Conditional) intra-class correlation, $\rho$ | .272                      | .143            | .134          | .113         | .244         | .124            | .234         | .115            |
| Model deviance (-2 log likelihood)            | 1036.82                   | 1014.71         | 963.91        | 961.81       | 1119.98      | 1096.47         | 1042.56      | 1022.76         |

Note. \*  $p < .05$ , \*\*  $p < .01$ , \*\*\*  $p < .001$

These intra-class correlations endorse the need to use multilevel models for these nested data. All succeeding models in this Chapter will therefore be contrasted to the three-level Conditional-Intercept model<sup>2</sup>.

Unexpected strong effects were associated with the different sites of the department stores for the 'feminine' typed styles. This demonstrates that the four department stores differ with respect to their average ratings of people-oriented, charismatic and empowerment leadership styles exhibited by the managers working there. The parameter estimates indicating the store differences show that managers of the Rotterdam store are the least people-oriented, the least charismatic and the least empowering, managers in the department store in Nijmegen are the most people-oriented, most charismatic and the most empowering, whereas managers in the The Hague and Tilburg stores are in between.<sup>3</sup> In the present study differences between the stores were not the object of study, so not attempt was made to explain these differences.

The departments employ between 5 and 40 employees. Size of a department may therefore influence leadership behavior and the interrelations between the manager and the subordinates. Several models were fitted (a) to estimate the independent effect of team size and (b) to check whether team sizes influenced the findings of the subsequent models that were estimated in this chapter. Team size did not independently have an impact on leadership styles (people-oriented leadership,  $t = -.44$ , *ns.*; task-oriented leadership,  $t = .83$ , *ns.*; charismatic leadership  $t = -.46$ , *ns.*; empowerment,  $t = -.46$ , *ns.*), neither did addition of team size to the other models result in any significant changes in deviance (see models 6, 7 and 15, Appendix 4.1).<sup>4</sup>

#### *Manager Sex and Gender-typing of Departments as Predictors of Leadership Styles*

It was hypothesized that female managers, compared to male managers show more people-oriented, charismatic and empowering leadership styles, whereas male managers, compared to female managers, display more task-oriented leadership styles (Hypothesis 1). Furthermore, it was expected that the more a department is feminine-typed, male and female managers will show more people-oriented, empowering and charismatic leadership styles, and less task-oriented leadership. When a department is more masculine-typed, male and female managers were expected to show more task-oriented leadership and less people-oriented, empowering and charismatic leadership (Hypothesis 2).

<sup>2</sup> Although there is no significant contribution of adding the third level to the model for task-oriented leadership, the three-level model does more justice to the nesting of the data.

<sup>3</sup> Analyses were also run with Nijmegen, The Hague or Tilburg as the baseline store to which the others are compared. These models show that only Tilburg and The Hague do not significantly differ from each other ( $t = .99$ , *ns.*). Both these stores significantly differ from Nijmegen and Rotterdam. The latter two also differ significantly from each other.

<sup>4</sup> The marginal effect of team size on model 4.5 (see model 7, Appendix 4.1,  $\chi^2 = 12.97$ ,  $p < .08$ ) could not be attributed to any of the parameters in the model. None of the parameters produced significant effects.



To test these hypotheses, for each leadership style a model was fitted that included predictor variables at the department and shop assistant level. At the shop assistant level (Level-1), sex of the shop assistant was included in the model, which is given by

$$(\text{LEADERSHIP STYLE})_{ijk} = \beta_{0jk} + \beta_{1jk} (\text{SA SEX})_{ijk} + e_{ijk}, \quad (4.3)$$

where the indices  $ijk$  refer to the scores of shop assistant  $i$  of department  $j$  in department store  $k$  on the dependent variable LEADERSHIP STYLE and the (Level-1) predictor variable shop assistant sex (SA SEX). The parameters  $\beta_{0jk}$  and  $\beta_{1jk}$  are department specific regression coefficients (intercept and slope) and the  $e_{ijk}$  is the residual.

At the departmental level (Level-2), sex of the manager, the gender-typing of the department and their interaction were included as predictor variables in model:

$$\begin{aligned} \beta_{0jk} &= \gamma_{00k} + \gamma_{01k} (\text{MAN SEX})_{jk} + \gamma_{02k} (\text{GTD})_{jk} + \gamma_{03k} (\text{MAN SEX})_{jk} * (\text{GTD})_{jk} + u_{0jk} \\ \beta_{1jk} &= \gamma_{10k} + \gamma_{11k} (\text{MAN SEX})_{jk} + \gamma_{12k} (\text{GTD})_{jk} + \gamma_{13k} (\text{MAN SEX})_{jk} * (\text{GTD})_{jk} + u_{1jk}, \end{aligned} \quad (4.4)$$

in which  $(\text{MAN SEX})_{jk}$  stands for sex of the manager of department  $j$  in department store  $k$  and  $(\text{GTD})_{jk}$  stands for gender-type of department  $j$  in department store  $k$ . The  $\gamma$ s are the regression coefficients. The  $u_{ijk}$ s are department specific residual terms. The model to be estimated is a combined model, found by substituting the Level-2 model (4.4) and the Level-3 model (4.2) into the Level-1 model (4.3). This model can be written as:

$$\begin{aligned} (\text{LEADERSHIP STYLE})_{ijk} = & d_{000} + d_{001} (\text{THE HAGUE}) + d_{002} (\text{NIJMEGEN}) + d_{003} (\text{TILBURG}) + \gamma_{01k} (\text{MAN SEX})_{jk} + \\ & \gamma_{02k} (\text{GTD})_{jk} + \gamma_{03k} (\text{MAN SEX})_{jk} * (\text{GTD})_{jk} + \gamma_{10k} (\text{SA SEX})_{ijk} + \gamma_{11k} (\text{MAN SEX})_{jk} * (\text{SA SEX})_{ijk} + \\ & \gamma_{12k} (\text{GTD})_{jk} * (\text{SA SEX})_{ijk} + \gamma_{13k} (\text{MAN SEX})_{jk} * (\text{GTD})_{jk} * (\text{SA SEX})_{ijk} + \\ & u_{0jk} + u_{1jk} (\text{SA SEX})_{ijk} + e_{ijk} \end{aligned} \quad (4.5)$$

Parameter estimates, standard errors and deviances for model (4.5), fitted for people-oriented leadership, task-oriented leadership, and charismatic leadership are presented in Table 4.2.A

In Table 4.2.B., expected values for the dependent variables are given for male and female managers on masculine-typed and feminine-typed departments<sup>5</sup>.

Contrary to Hypothesis 1, sex of the manager did not significantly contribute to the prediction of the leadership styles (people-oriented leadership,  $t = .42$ , *ns.*; task-oriented leadership,  $t = -.43$ , *ns.*; charismatic leadership,  $t = .11$ , *ns.*; and empowerment,

<sup>5</sup> The expected values are based on the estimation in the models instead of sample means and standard deviations. The expected value for the subgroups is a better representation of the results than the sample mean for the subgroups. Expected values for the other stores can be obtained by adding the parameter estimates  $d_{001}$ ,  $d_{002}$  and  $d_{003}$  to the expected value for Rotterdam.

Table 4.2.A  
*Estimated Leadership Styles by Sex of Manager, Gender-typing of Department and Sex of Shop Assistant.*

| Parameters  | Estimate (standard error) |                          |                 |                 |
|---|---------------------------|--------------------------|-----------------|-----------------|
|   | People-oriented           | Task-oriented            | Charismatic     | Empowerment     |
| <i>Fixed Parameters:</i>  |                           |                          |                 |                 |
| - baseline R'DAM $d_{000}$  | 4.055 (.283)              | 3.975 (.246)             | 3.965 (.315)    | 4.461 (.294)    |
| - THE HAGUE, $d_{001}$  | .794 (.271)**             | .110 (.233)              | 1.124 (.302)*** | .619 (.265)*    |
| - NIJMEGEN, $d_{002}$   | 1.308 (.241)***           | -.132 (.204)             | 1.410 (.268)*** | 1.209 (.234)*** |
| - TILBURG, $d_{003}$  | .576 (.226)*              | .178 (.190)              | .717 (.250)**   | .466 (.218)*    |
| Department variables (Level-2):   |                           |                          |                 |                 |
| - sex of the manager <sup>a</sup> , $\gamma_{01k}$                          | .163 (.384)               | -.145 (.340)             | .046 (.427)     | .137 (.408)     |
| - gender-type of department <sup>b</sup> , $\gamma_{02k}$                   | .014 (.196)               | -.099 (.172)             | .015 (.218)     | .002 (.209)     |
| - interaction manager sex x gender-type department, $\gamma_{03k}$          | .334 (.295)               | -.143 (.261)             | .481 (.328)     | .381 (.314)     |
| Shop-assistant variables (Level-1):   |                           |                          |                 |                 |
| - Sex of the shop assistant <sup>a</sup> , $\gamma_{10k}$                   | -.088 (.268)              | -.060 (.237)             | -.135 (.295)    | .051 (.288)     |
| <i>Cross-Level Interactions:</i>  |                           |                          |                 |                 |
| - shop assistant sex x manager sex, $\gamma_{11k}$                          | -.261 (.437)              | .655 (.388) <sup>#</sup> | .038 (.429)     | -.238 (.464)    |
| - shop assistant sex x gender-type department, $\gamma_{12k}$               | -.160 (.217)              | -.057 (.191)             | -.047 (.238)    | -.083 (.232)    |
| - shop assistant sex x manager sex x gender-type department, $\gamma_{13k}$ | -.194 (.333)              | .531 (.295) <sup>#</sup> | -.381 (.368)    | -.301 (.353)    |
| <i>Variance Components<sup>c</sup>:</i>                                     |                           |                          |                 |                 |
| Department variance (Level-2):  |                           |                          |                 |                 |
| - intercept, $\omega_0^2$   | .202 (.183)               | .104 (.056)              | .212 (.097)     | .276 (.208)     |
| - shop assistant sex /intercept, $\omega_{01}$                              | -.049 (.187)              | .0                       | .0              | -.178 (.221)    |
| - shop assistant sex, $\omega_1^2$  | .089 (.253)               | .0                       | .0              | .237 (.295)     |
| Shop assistant variance (Level-1):  |                           |                          |                 |                 |
| -residual, $\delta^2$   | 1.140 (.103)              | .989 (.085)              | 1.494 (.129)    | 1.176 (.106)    |
| Deviance  | 1009.17                   | 950.029                  | 1091.68         | 1018.28         |

Note. \*  $p < .05$ , \*\*  $p < .01$ , \*\*\*  $p < .001$ , <sup>#</sup>  $p < .10$

<sup>a</sup> Sex is dummy coded, 0 for men and 1 for women.

<sup>b</sup> Negative values indicate feminine-typed departments; positive values indicate masculine departments (scores are centered and range from -1.82 to 1.88).

<sup>c</sup> ML3 replaces estimated variance components that approach 0.0000 with 0.

Table 4.2.B

*Expected Values for the perception of People-oriented, Task-oriented, Charismatic and Empowering Leadership Styles as a function of Manager Sex, Gender-type of Department, and Sex of the Shop Assistant.*

| Leadership style                    | People-oriented |        | Task-oriented |        | Charisma |        | Empowerment |        |
|-------------------------------------|-----------------|--------|---------------|--------|----------|--------|-------------|--------|
| Gender type-department <sup>1</sup> | Manager sex     |        |               |        |          |        |             |        |
| Shop-assistant sex                  | Male            | Female | Male          | Female | Male     | Female | Male        | Female |
| Feminine                            |                 |        |               |        |          |        |             |        |
| Male                                | 4.04            | 3.75   | 4.11          | 4.15   | 3.99     | 3.35   | 4.46        | 4.09   |
| Female                              | 4.16            | 4.10   | 4.12          | 4.12   | 3.87     | 3.83   | 4.62        | 4.41   |
| Total <sup>2</sup>                  | 4.14            | 3.88   | 4.13          | 4.12   | 3.89     | 3.80   | 4.57        | 4.41   |
| Masculine                           |                 |        |               |        |          |        |             |        |
| Male                                | 4.07            | 4.68   | 3.84          | 3.51   | 3.95     | 4.67   | 4.46        | 5.11   |
| Female                              | 3.77            | 4.04   | 3.71          | 4.74   | 3.79     | 4.00   | 4.40        | 4.41   |
| Total <sup>2</sup>                  | 3.90            | 4.18   | 3.78          | 4.29   | 3.87     | 4.26   | 4.44        | 4.68   |
| Total <sup>2</sup>                  |                 |        |               |        |          |        |             |        |
| Male                                | 4.06            | 4.09   | 3.90          | 3.95   | 3.97     | 3.83   | 4.46        | 4.48   |
| Female                              | 3.86            | 3.89   | 3.83          | 4.17   | 3.80     | 3.87   | 4.45        | 4.42   |
| Total <sup>2</sup>                  | 3.95            | 3.93   | 3.85          | 4.14   | 3.87     | 3.87   | 4.47        | 4.45   |

<sup>1</sup> Gender type of department is a continuous variable. The expected values for feminine typed departments represent values one standard deviation (1.3345) below the sample mean and for masculine departments the expected values represent one standard deviation above the sample mean.

<sup>2</sup> Expected values for totals are based on the more parsimonious models (model 3 and 5 from Appendix 4.1).



$t = .34, ns.$ ). Additionally, more parsimonious models were fitted to test the first hypothesis. These can easily be derived by omitting variables except for the ones under study. In Appendix 4.1, deviances from several simpler models are presented (model 3 and model 5, in comparison with the full model 9), none of which shows a significant decrease in the deviance compared to the Conditional-Intercept model. The model with sex as a single predictor (model 3) did show a marginally significant effect for task-oriented leadership ( $\chi^2 = 3.64, p < .06$ ). Female managers tended to be more task-oriented than their male counterparts ( $t = 1.91, p < .10$ ). However, this effect disappears when the context is taken into consideration (model 5,  $\chi^2 = 2.10, p < .35, t = 1.33, p < .20$ ). The first hypothesis, that there are no sex differences in leadership style, is therefore rejected.

As can be seen in Table 4.2.A., gender-typing of the department also did not significantly contribute to the prediction of the leadership styles (people-oriented leadership,  $t = .07, ns.$ ; task-oriented leadership,  $t = -.58, ns.$ ; charismatic leadership,  $t = .07, ns.$ ; and empowerment,  $t = .01, ns.$ ). In the simpler models, gender-typing of the department also showed no significant effects (see model 4 and model 5, Appendix 4.1). The second hypothesis, that gender-typing of the organizational context influences leader behavior of both male and female managers, is therefore rejected.

Likewise, the interaction between sex of the manager and gender-typing of the department did not produce significant effects in model (4.5) (people-oriented leadership,  $t = 1.13, ns.$ ; task-oriented leadership,  $t = -.55, ns.$ ; charismatic leadership,  $t = 1.47, p < .20.$ ; and empowerment,  $t = 1.21, ns.$ ), nor in more parsimonious models (models 5, Appendix 4.1, see also note 3). This suggests that neither male nor female managers adapt their leadership styles to the gender-typing of the context. Hypothesis 2 is therefore rejected.

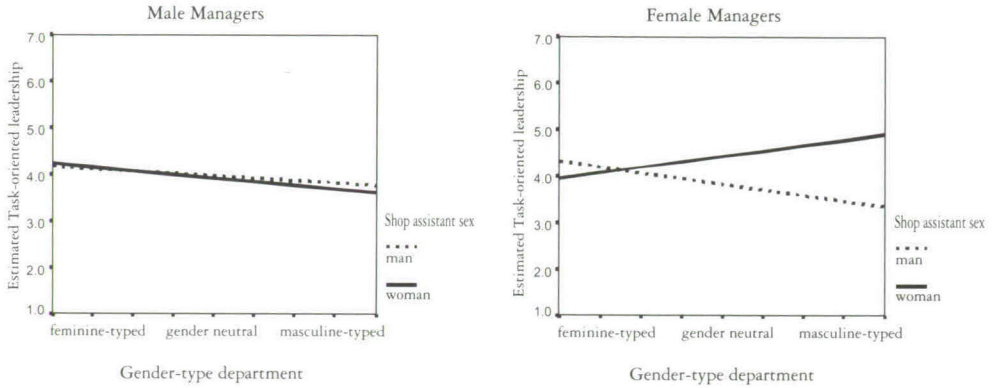
There was no significant effect for sex of the shop assistant on the different leadership styles (people-oriented leadership,  $t = -.33, ns.$ ; task-oriented leadership,  $t = -.25, ns.$ ; charismatic leadership,  $t = -.44, p < .20.$ ; and empowerment,  $t = .18, ns.$ ). Furthermore, sex of the shop assistant did not moderate the relationships between sex of the manager, gender-typing of the department and the 'feminine typed' leadership styles (people-oriented leadership,  $t = .42, ns.$ ; charismatic leadership,  $t = -1.04, ns.$ ; and empowerment,  $t = .85, ns.$ ), nor did it independently contribute to the prediction of the leadership styles (see model 8, Appendix 4.1). However, both the two-way and the three-way cross-level interactions were marginally significant for task-oriented leadership (manager sex x shop assistant sex,  $t = 1.69, p < .10$ ; manager sex x gender-typing department x shop assistant sex,  $t = 1.80, p < .10$ ). This effect was due to the single fact that female managers leading more masculine-typed departments were rated more task-oriented by female shop assistants (see Figure 4.1).

In summary, the analyses show that the managers of the different departments differ from each other in leadership styles, but that these differences could not be explained by the explanatory variables thus far introduced. Neither sex of the manager, gender-type of the department, nor sex of the rater contributed to the explanation of differences in leadership styles. The deviance of the fitted model did not differ from the

three-level Conditional-Intercept model for all of the leadership styles (people-oriented leadership,  $\chi^2 = 5.54, p < .78$ ; task-oriented leadership,  $\chi^2 = 11.78, p < .23$ ; charismatic leadership,  $\chi^2 = 4.79, p < .85$ ; and empowerment,  $\chi^2 = 4.48, p < .88$ ).

Figure 4.1. Task-Oriented Leadership:

Estimated Effects of Manager Sex, Gender-type of Department and Shop Assistant Sex.



### Working Hours

Hypotheses 3a and 3b concerned the effect of stereotypes on the perception of male and female managers by shop assistants who have limited information. It was hypothesized that in gender-role congruent contexts judgments will be assimilated to gender stereotypes (hypothesis 3a). In gender-role incongruent contexts, it was predicted that judgments will be contrasted, resulting in more gender-atypical judgments by shop assistants with limited individuating information compared to shop assistants who know their manager well (hypothesis 3b). Hypothesis 3 implies a 3-way interaction effect between the factors sex of the leader, gender-typing of the context and amount of individuating information, i.e. interaction effects between sex of the leader and gender-typing of the context on perceptions of leadership styles changes with the level of individuating information.

At Level-1, the shop assistant level, the model to test this hypothesis includes the work hours as a predictor variable. It can be written as:

$$(\text{LEADERSHIP STYLE})_{ijk} = \beta_{0jk} + \beta_{1jk} (\text{WORK HOURS})_{ijk} + e_{ijk} \quad (4.6)$$

At Level-2, the department level, the model contains the predictor variables sex of the manager, gender-typing of the department and their interaction. The model is given by:

$$\begin{aligned} \beta_{0jk} &= \gamma_{00k} + \gamma_{01k} (\text{MAN SEX})_{jk} + \gamma_{02k} (\text{GTD})_{jk} + \gamma_{03k} (\text{MAN SEX})_{jk} * (\text{GTD})_{jk} + u_{0jk} \\ \beta_{1jk} &= \gamma_{10k} + \gamma_{11k} (\text{MAN SEX})_{jk} + \gamma_{12k} (\text{GTD})_{jk} + \gamma_{13k} (\text{MAN SEX})_{jk} * (\text{GTD})_{jk} + u_{1jk} \end{aligned} \quad (4.7)$$

Substituting (4.7) and (4.2) into (4.6) results in the fitted, combined model, that is given by:

Table 4.3.  
*Estimated Leadership Styles by Sex of manager, Gender-typing of Department and Work Hours.*

| Parameters  | Estimate (standard error) |               |                 |                          |
|---|---------------------------|---------------|-----------------|--------------------------|
|   | People-oriented           | Task-oriented | Charismatic     | Empowerment              |
| <i>Fixed Parameters:</i>  |                           |               |                 |                          |
| - Baseline R'DAM $d_{000}$  | 4.063 (.210)              | 3.977 (.159)  | 3.919 (.230)    | 4.543 (.201)             |
| - THE HAGUE, $d_{001}$  | .718 (.270) **            | .173 (.213)   | 1.061 (.298)*** | .577 (.262)*             |
| - NIJMEGEN, $d_{002}$   | 1.150 (.243)***           | -.157 (.183)  | 1.257 (.266)*** | 1.082 (.232)***          |
| - TILBURG, $d_{003}$  | .444 (.230) <sup>#</sup>  | .232 (.169)   | .662 (.250)**   | .334 (.218)              |
| Department variables (Level-2):                                     |                           |               |                 |                          |
| - sex of the manager <sup>a</sup> , $\gamma_{01k}$                  | -.036 (.224)              | .304 (.186)   | .139 (.250)     | -.047 (.219)             |
| - gender-type of department <sup>b</sup> , $\gamma_{02k}$           | -.016 (.114)              | -.166 (.093)  | .039 (.127)     | .007 (.168)              |
| - interaction sex x gender-type department, $\gamma_{03k}$          | .057 (.173)               | .316 (.142)*  | .106 (.193)     | -.001 (.110)             |
| Shop-assistant variables (Level-1):                                 |                           |               |                 |                          |
| - work hours <sup>c</sup> , $\gamma_{10k}$                          | .029 (.012)*              | -.020 (.010)* | .019 (.014)     | .022 (.012) <sup>#</sup> |
| Cross-Level Interactions:   |                           |               |                 |                          |
| - work hours x manager sex, $\gamma_{11k}$                          | -.002 (.019)              | -.022 (.017)  | -.011 (.022)    | .018 (.019)              |
| - work hours x gender-type department, $\gamma_{12k}$               | .004 (.010)               | .012 (.009)   | .006 (.011)     | .002 (.010)              |
| - work hours x manager sex x gender-type department, $\gamma_{13k}$ | .009 (.015)               | -.027 (.013)* | .001 (.017)     | .012 (.014)              |
| <i>Variance Components:</i>   |                           |               |                 |                          |
| Department variance (Level-2):                                      |                           |               |                 |                          |
| - intercept, $\omega_0^2$   | .195 (.078)               | .088 (.050)   | .219 (.097)     | .149 (.072)              |
| - work hours /intercept, $\omega_{01}$                              | .001 (.004)               | .005 (.003)   | .004 (.005)     | .0                       |
| - work hours sex, $\omega_1^2$                                      | .009 (.015)               | .001 (.001)   | .001 (.001)     | .0                       |
| Shop assistant variance (Level-1):                                  |                           |               |                 |                          |
| - residual, $\sigma^2$  | 1.080 (.099)              | .965 (.086)   | 1.455 (.131)    | 1.162 (.010)             |
| Deviance  | 998.163                   | 936.35        | 1089.33         | 1006.93                  |

*Note.* \*  $p < .05$ , \*\*  $p < .01$ , \*\*\*  $p < .001$ , <sup>#</sup>  $p < .10$   
<sup>a</sup> Sex is dummy coded, 0 for men and 1 for women.  
<sup>b</sup> Negative values indicate feminine-typed departments; positive values indicate masculine departments (scores were centered, ranges from -1.82 to 1.88).  
<sup>c</sup> Work hours is centered and ranges from - 16.54 to 27.47



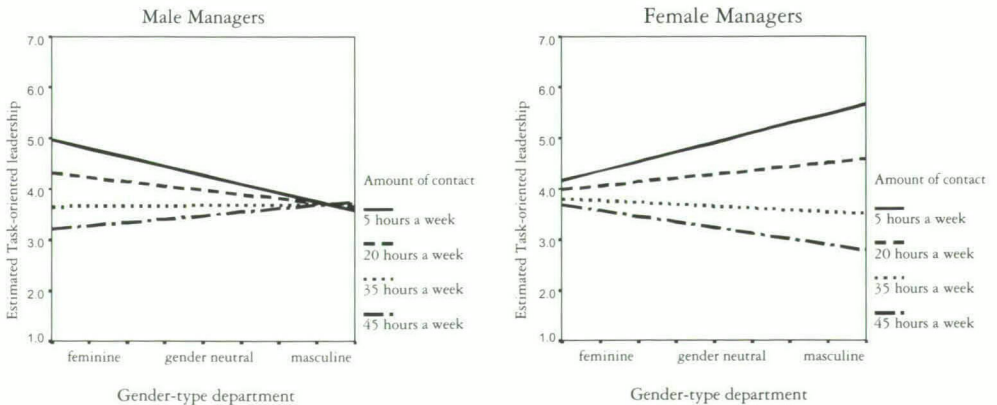
$$\begin{aligned}
 (\text{LEADERSHIP STYLE})_{ijk} = & d_{000} + d_{001}(\text{THE HAGUE}) + d_{002}(\text{NIJMEGEN}) + d_{003}(\text{TILBURG}) + \\
 & \gamma_{01k}(\text{MAN SEX})_{jk} + \gamma_{02k}(\text{GTD})_{jk} + \gamma_{03k}(\text{MAN SEX})_{jk} * (\text{GTD})_{jk} + \gamma_{10k}(\text{WORK HOURS})_{ijk} + \\
 & \gamma_{11k}(\text{MAN SEX})_{jk} * (\text{WORK HOURS})_{ijk} + \gamma_{12k}(\text{GTD})_{jk} * (\text{WORK HOURS})_{ijk} + \\
 & \gamma_{13k}(\text{MAN SEX})_{jk} * (\text{GTD})_{jk} * (\text{WORK HOURS})_{ijk} + \\
 & \mu_{0jk} + \mu_{1jk}(\text{WORK HOURS})_{ijk} + \epsilon_{ijk}
 \end{aligned} \quad (4.8)$$

Parameter estimates, standard errors and deviances for model (4.8), fitted for the different leadership styles are presented in Table 4.3. For task-oriented leadership the deviance of the model significantly differs from the Conditional-Intercept model ( $\chi^2 = 25.46$ ,  $p < .003$ ). For people-oriented leadership and empowerment the model differs marginally ( $\chi^2 = 16.55$ ,  $p < .06$  and  $\chi^2 = 15.83$ ,  $p < .07$ , respectively) but no significant decrease in deviance was found for charismatic leadership ( $\chi^2 = 7.14$ ,  $p < .62$ ). The results will be discussed below.

For task-oriented leadership, the significant effects for work hours ( $t = -1.97$ ,  $p < .05$ ) and the interaction between sex and gender-type of the department ( $t = 2.23$ ,  $p < .05$ ) are qualified by the significant work hours x manager sex x gender-type department interaction ( $t = -2.17$ ,  $p < .05$ ). In Figure 4.2 this interaction is displayed. There is no evidence that work hours moderates the effect of gender-role congruent contexts on leadership styles. Thus, the number of work hours did not moderate the perception of task-oriented leadership for male managers working at a masculine-typed department and female managers working at a feminine-typed department. Hypothesis 3a, that in gender-role congruent contexts judgments will be assimilated to gender stereotypes, is therefore rejected. For gender-role incongruent contexts work hours related negatively to task-oriented leadership. Male managers leading a gender-role incongruent

Figure 4.2.

*Stereotypes and Task-oriented Leadership: The Interaction of Amount of contact (work hours) with Manager Sex and Gender-type of Department.*



ent (feminine-typed) department are rated more task-oriented by the shop assistants who have relatively limited individuating information about their manager. This effect is opposite to the predicted effect (hypothesis 3b). The female managers of gender-role incongruent (masculine-typed) departments were rated more task-oriented by shop assistants who have limited individuating information than by shop assistants who, because of their longer working hours, have ample opportunities to observe their leader's behavior. Thus, only for female managers, the hypothesis that in gender-role incongruent contexts judgements are contrasted to gender stereotypes (hypothesis 3b) is corroborated.

For people-oriented leadership, the only additional effect to the Conditional-Intercept model was the effect for work hours ( $t = 2.45, p < .02$ ). A manager is rated more people-oriented as the shop assistant works more hours. A similar, but marginally significant effect was found for empowerment ( $t = 1.83, p < .10$ )<sup>6</sup>. Furthermore, introduction of work hours in the models reduced the difference between the four department stores in people-oriented leadership and empowerment somewhat, as the dummy variable for the Tilburg store was not significant any longer. Apparently, the shop assistants in the Tilburg store work longer hours on the average than shop assistants in Rotterdam.

Summarizing, the amount of contact between shop assistants and their managers, as measured by the work hours, influenced the perception of people-oriented leadership, task-oriented leadership and empowerment. Shop assistants who work longer hours rate their manager as more people-oriented and less task-oriented, and there is a tendency to judge the manager to be more empowering as well. Amount of contact did not influence subordinates' perceptions of charisma. Work hours moderated the relation between sex of the manager and gender-typing of the department only for task-oriented leadership. In the more gender-role incongruent departments, managers were rated more task-oriented by shop assistants with more limited individuating information. For female managers this corresponded to the predicted direction of a contrast effect in the gender-role incongruent situation. For male managers an assimilation effect was found in the gender-role incongruent situation. This effect was in the opposite direction as predicted.

### *Gender Identity*

Whether perceived gender identity of male and female managers relates to their perceived leadership style is the next topic that is addressed. Before examining this question, some preliminary analyses were run on possible sex differences on ratings of masculinity and femininity. Table 4.4.A shows that ratings of masculinity and femininity are not different for the male and female managers (expected values (pooled over the four stores) for masculinity males = 3.30, females = 3.27,  $t = .49, ns.$ ; expected values for femininity males = 3.10, females = 3.12,  $t = .38, ns.$ ). In comparison with self-rat-

<sup>6</sup> As can be seen in Appendix 4.1, the decrease in deviance of the more parsimonious models 10, 11 and 12 from the Conditional-Intercept model is significant for people-oriented leadership and empowerment. The significance of these models can be attributed solely to the effect of work hours.

Table 4.4.A.  
*Estimates of Perceived Masculinity and Femininity by Manager Sex.*

| Parameters   | Estimate (standard error) |                |
|--|---------------------------|----------------|
|  | Masculinity               | Femininity     |
| <i>Fixed Parameters:</i>                           |                           |                |
| - baseline R'DAM $d_{000}$                         | 3.191 (.077)              | 2.899 (.086)   |
| - THE HAGUE, $d_{001}$                             | .076 (.108)               | .249 (.121)*   |
| - NIJMEGEN, $d_{002}$                              | .277 (.097)**             | .436 (.109)*** |
| - TILBURG, $d_{003}$                               | .034 (.091) *             | .165 (.101)    |
| Department variables (Level-2):                    |                           |                |
| - sex of the manager <sup>a</sup> , $\gamma_{01k}$ | - .035 (.070)             | .030 (.078)    |
| <i>Variance Components:</i>                        |                           |                |
| Department variance (Level-2):                     |                           |                |
| - intercept, $\omega_{00}^2$                       | .023 (.013)               | .096 (.062)    |
| Shop assistant variance (Level-1):                 |                           |                |
| - residual, $\sigma^2$                             | .233 (.020)               | .831 (.075)    |
| Deviance   | 475.549                   | 911.185        |

Note. \*  $p < .05$ , \*\*  $p < .01$ , \*\*\*  $p < .001$   
<sup>a</sup> Sex is dummy coded, 0 for men and 1 for women.  
<sup>b</sup> Femininity and masculinity scores range from 1 to 5

Table 4.4.B  
*Number of Male and Female Managers Classified as Masculine, Feminine, Androgynous or Undifferentiated*

| Manager sex | Gender-identity classification <sup>1</sup> |          |           |             |
|-------------|---|----------|-----------|-------------|
|             | Undifferentiated                            | Feminine | Masculine | Androgynous |
| Male        | 33 (14)                                     | 16 (6)   | 19 (6)    | 32 (14)     |
| Female      | 30 (12)                                     | 21 (3)   | 17 (3)    | 32 (12)     |

Note. The first number represents the percentage of shop assistants that rated their manager masculine, feminine, androgynous or undifferentiated. Between parentheses are the numbers based on aggregated data.  
<sup>1</sup> Gender identity classifications were calculated on the median-split of the scores on the GIQ (weighted for manager sex). Thus feminine individuals are individuals that are rated high (i.e., above the median) on masculinity and low (i.e., below the median) on masculinity, masculine individuals are rated high on masculinity and low on femininity, undifferentiated individuals are rated low on both masculinity and femininity, and androgynous individuals are rated both highly masculine and feminine.



ings of masculinity and femininity in a cross-sectional sample of the Dutch population (masculinity: males = 3.36, females = 3.19, femininity: males = 3.40, females = 3.72, Willemssen & Fischer, 1999), the perceived gender identity of the managers is somewhat less sex-stereotypic and less feminine. Ratings of masculinity and femininity were higher in the Nijmegen store ( $t = 2.85, p < .01$  and  $t = 4.02, p < .001$ , respectively) and ratings of femininity were also higher for the store in The Hague ( $t = 2.06, p < .05$ ).

An alternative way to look at masculinity and femininity is to categorize individuals in four gender identity types. Masculine individuals are people who are rated high on masculinity and low on femininity, feminine individuals are rated high on femininity but low on masculinity, androgynous individuals are rated high on both and undifferentiated individuals are rated neither feminine, nor masculine. In Table 4.4.B it can be seen that the male and female managers are categorized as feminine, masculine, androgynous and undifferentiated to the same extent. Both male and female managers are mostly described as androgynous or undifferentiated, more than that they are described masculine or feminine.

To study whether subordinate ratings of a leader's gender identity relate to subordinate perception of leadership styles, a model was fitted with the perception of masculinity (masc), the perception of femininity (fem) and the interaction between masculinity and femininity as predictors at Level-1. The model is given by:

$$(\text{LEADERSHIP STYLE})_{ijk} = \beta_{0jk} + \beta_{1jk} (\text{MASC})_{ijk} + \beta_{2jk} (\text{FEM})_{ijk} + \beta_{3jk} (\text{MASC})_{ijk} * (\text{FEM})_{ijk} + e_{ijk} \quad (4.9)$$

As this relationship was expected to be moderated by the sex of the manager, at Level-2, the sex of the manager was added to the model. The model is written as:

$$\begin{aligned} \beta_{0jk} &= \gamma_{00k} + \gamma_{01k} (\text{MAN SEX})_{jk} + u_{0jk} \\ \beta_{1jk} &= \gamma_{10k} + \gamma_{11k} (\text{MAN SEX})_{jk} + u_{1jk} \\ \beta_{2jk} &= \gamma_{20k} + \gamma_{21k} (\text{MAN SEX})_{jk} + u_{2jk} \\ \beta_{3jk} &= \gamma_{30k} + \gamma_{31k} (\text{MAN SEX})_{jk} \end{aligned} \quad (4.10)$$

The regression coefficient for the interaction between masculinity and femininity,  $\beta_{3jk}$  is defined as a fixed effect<sup>7</sup>. Imputation of (4.10) and (4.2) into (4.9) results in the

<sup>7</sup> The individual  $\beta$ s that make up the interaction both are defined random and consequently their covariance is taken into account into the random part of the model ( $w_{12}$ ). Adding the random term  $u_{3jk}$  for this effect probably leads to overfitting of the model. More importantly, the four additional parameters that need to be estimated when  $u_{3jk}$  is added to the model ( $\omega_{3^2}$ ,  $\omega_{03}$ ,  $\omega_{13}$  and  $\omega_{23}$ ) are barely interpretable. Finally, the number of parameters in the estimated model is already high in respect to the total N of 327. Convergence of the model with four additional parameters is highly unlikely, especially since the covariance term  $\omega_{12}$  cannot be expected to be independent of  $\omega_{13}$  and  $\omega_{23}$ , which can also be written as  $\omega_{11*2}$  and  $\omega_{21*2}$ ).

Table 4.5.  
*Estimated Leadership Style by Perceived Gender Identity*

| Parameters   | Estimates (standard errors) |               |                |                          |
|--|-----------------------------|---------------|----------------|--------------------------|
|  | People-oriented             | Task-oriented | Charismatic    | Empowerment              |
| <i>Fixed Parameters:</i>                                 |                             |               |                |                          |
| - baseline R'DAM $d_{000}$                               | 4.207 (.156)                | 3.932 (.159)  | 4.135 (.147)   | 4.732 (.155)             |
| - THE HAGUE, $d_{001}$                                   | .537 (.215)*                | .070 (.215)   | .825 (.225)*** | .399 (.217) <sup>#</sup> |
| - NIJMEGEN, $d_{002}$                                    | .696 (.200)***              | -.407 (.194)* | .767 (.194)*** | .746 (.210)***           |
| - TILBURG, $d_{003}$                                     | .385 (.183)*                | .033 (.181)   | .470 (.190)*   | .324 (.180) <sup>#</sup> |
| Department variables (Level-2):                          |                             |               |                |                          |
| - sex of the manager <sup>a</sup> , $\gamma_{01k}$       | -.166 (.145)                | .168 (.146)   | -.130 (.160)   | -.214 (.143)             |
| Shop-assistant variables (Level-1):                      |                             |               |                |                          |
| - femininity <sup>b</sup> , $\gamma_{10k}$               | 1.060 (.174)***             | -.085 (.209)  | .942 (.208)*** | 1.100 (.204)***          |
| - masculinity <sup>c</sup> , $\gamma_{20k}$              | .457 (.201)*                | .618 (.212)** | .574 (.243)*   | .177 (.218)              |
| - femininity x masculinity, $\gamma_{30k}$               | -.274 (.282)                | .229 (.309)   | -.465 (.314)   | -.810 (.319)*            |
| Cross-Level Interactions:                                |                             |               |                |                          |
| - femininity x manager sex, $\gamma_{11k}$               | -.073 (.214)                | .088 (.276)   | -.263 (.270)   | -.378 (.262)             |
| - masculinity x manager sex, $\gamma_{21k}$              | .024 (.253)                 | .042 (.268)   | .509 (.319)    | .273 (.277)              |
| - masculinity x femininity x manager sex, $\gamma_{31k}$ | .717 (.313)*                | .479 (.347)   | .927 (.348)**  | 1.093 (.357)**           |
| <i>Variance Components:</i>                              |                             |               |                |                          |
| Department variance (Level-2):                           |                             |               |                |                          |
| - intercept, $\omega_0^2$                                | .118 (.051)                 | .096 (.062)   | .116 (.059)    | .074 (.049)              |
| - femininity/intercept, $\omega_{01}$                    | .0                          | -.099 (.003)  | -.142 (.068)   | -                        |
| - femininity, $\omega_1^2$                               | .0                          | .241 (.144)   | .095 (.139)    | .148 (.121)              |
| - masculinity/intercept, $\omega_{02}$                   | .0                          | .0            | .047 (.075)    | .0                       |
| - masculinity, $\omega_2^2$                              | .0                          | .0            | .187 (.194)    | .0                       |
| - femininity/masculinity, $\omega_{12}$                  | -                           | .0            | -.159 (.140)   | .0                       |
| Shop assistant variance (Level-1):                       |                             |               |                |                          |
| - residual, $\sigma^2$                                   | .762 (.066)                 | .831 (.075)   | 1.011 (.092)   | .817 (.074)              |
| Deviance   | 873.322                     | 911.185       | 958.407        | 933.103                  |

Note. \*  $p < .05$ , \*\*  $p < .01$ , \*\*\*  $p < .001$ , <sup>#</sup>  $p < .10$

<sup>a</sup> Sex is dummy coded, 0 for men and 1 for women.

<sup>b</sup> Femininity was centered and ranges from -2.077 to 1.522.

<sup>c</sup> Masculinity was centered and ranges from -2.109 to 1.292.

estimated model, which is given by:

$$\begin{aligned}
 (\text{LEADERSHIP STYLE})_{ijk} = & \\
 & d'_{000} + d'_{100}(\text{THE HAGUE}) + d'_{200}(\text{NIJMEGEN}) + d'_{300}(\text{TILBURG}) + \\
 & \gamma_{01k}(\text{MAN SEX})_{jk} + \gamma_{10k}(\text{MASC})_{ijk} + \gamma_{11k}(\text{MAN SEX})_{jk} * (\text{MASC})_{ijk} + \\
 & \gamma_{20k}(\text{FEM})_{ijk} + \gamma_{21k}(\text{MAN SEX})_{jk} * (\text{FEM})_{ijk} + \\
 & \gamma_{30k}(\text{MASC})_{ijk} * (\text{FEM})_{ijk} + \gamma_{31k}(\text{MAN SEX})_{jk} * (\text{MASC})_{ijk} * (\text{FEM})_{ijk} + \\
 & u_{0jk} + u_{1jk}(\text{MASC})_{ijk} + u_{2jk}(\text{FEM})_{ijk} + e_{ijk}.
 \end{aligned} \tag{4.11}$$

Parameter estimates, standard errors and deviances for the different models fitted are presented in Table 4.5. Clearly, model (4.11) shows improvement of fit compared to the Conditional-Intercept model for all of the leadership styles (people-oriented leadership,  $\chi^2 = 141.39$ ,  $p < .0001$ ; task-oriented leadership,  $\chi^2 = 50.63$ ,  $p < .0001$ ; charismatic leadership,  $\chi^2 = 138.06$ ,  $p < .0001$ ; and empowerment,  $\chi^2 = 89.66$ ,  $p < .0001$ ).

For task-oriented leadership the effect of masculinity is significant ( $t = 2.92$ ,  $p < .01$ ). Apparently, managers who are perceived to be masculine also use the stereotypical masculine style task-oriented leadership more frequently.

Table 4.5 also shows that perceived femininity relates positively to all of the stereotypical feminine leadership styles (people-oriented leadership,  $t = 6.09$ ,  $p < .001$ ; charismatic leadership,  $t = 4.53$ ,  $p < .001$ ; and empowerment,  $t = 5.39$ ,  $p < .001$ ). For people-oriented leadership and for charismatic leadership, masculinity also positively contributes to the prediction of these styles ( $t = 2.27$ ,  $p < .05$  and  $t = 2.36$ ,  $p < .02$  respectively). For empowerment, the masculinity x femininity interaction effect is significant ( $t = -2.54$ ,  $p < .02$ ). All of these effects are qualified by the significant masculinity x femininity x manager sex interaction (people-oriented leadership,  $t = 2.29$ ,  $p < .05$ ; charismatic leadership,  $t = 2.66$ ,  $p < .02$ ; and empowerment,  $t = 3.06$ ,  $p < .01$ ). Figure 4.3 shows these interactions. The interaction effects for people-oriented leadership and charisma are similar. For male managers both femininity and masculinity contribute to the perception of people-oriented and charismatic leadership. Especially femininity seems to contribute to people-oriented and charismatic leadership, as both managers high and low on masculinity are rated equally high on people-oriented leadership and charisma when they are high on femininity. The positive effect of masculinity thus becomes less strong when male managers are rated more feminine. For female managers this is the other way around. Masculinity contributes more strongly to people-oriented leadership and charisma when the ratings of femininity are also higher. Although again femininity relates positively to people-oriented leadership and charisma, this is more so for the individuals high on masculinity than female managers low on masculinity. Thus, female managers who are perceived to be feminine *and* masculine, i.e. androgynous managers, are rated high on people-oriented leadership and charisma. Male androgynous and feminine managers are rated equally high on people-oriented leadership.

For empowerment the result is different. Looking at the picture for female man-



Figure 4.3. A: Expected Values for People-Oriented Leadership as a function of Masculinity, Femininity and Manager Sex.

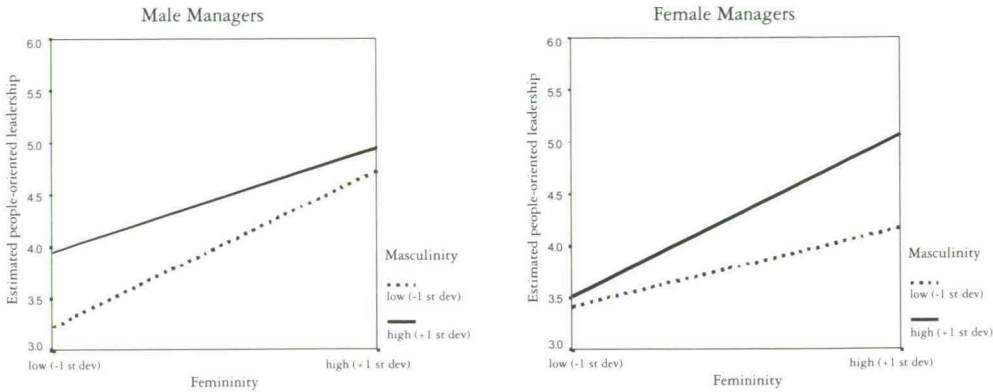


Figure 4.3. B: Expected Values for Charismatic Leadership as a function of Masculinity, Femininity and Manager Sex.

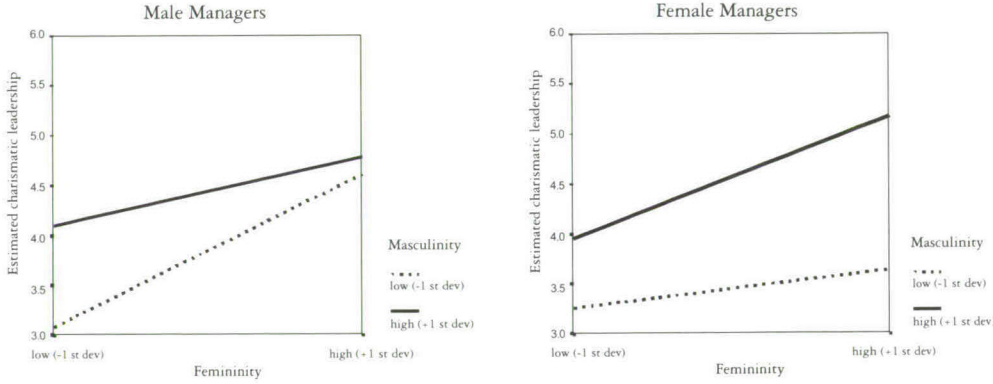
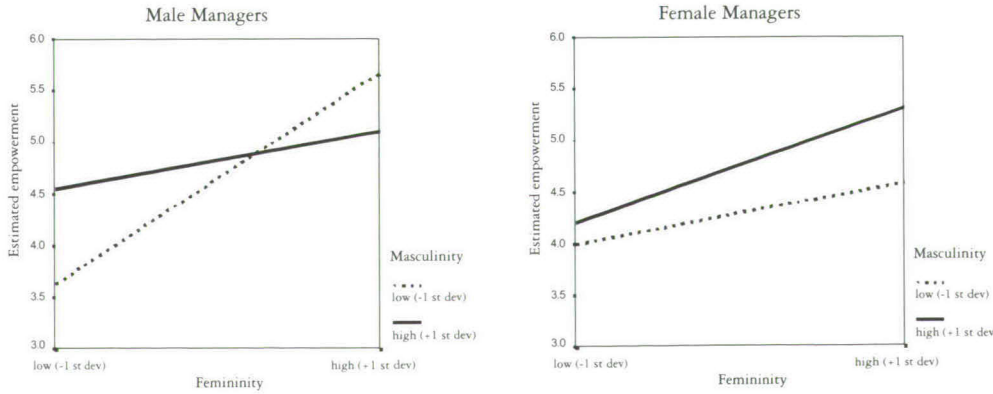


Figure 4.3. C: Expected Values for Empowerment as a function of Masculinity, Femininity and Manager Sex.



agers, it can be seen that ratings of masculinity hardly contribute to the perception of empowerment, although female managers who are rated high on masculinity and high on femininity, i.e. androgynous female managers, are perceived to be most empowering by their personnel. Femininity does contribute to the perception of empowerment for the female managers. For male managers, femininity does not add much to the perception of an empowering style for managers high on masculinity. For the managers low on masculinity, the effect of femininity is rather strong; Feminine male managers are rated most empowering.

Summarizing, whereas no effect was found of the sex of the manager on leadership style, the description of a manager's leadership style has a strong relationship with the perception of a manager's gender identity. Masculinity relates to the perception of more task-oriented leadership behavior. The perception of stereotypical feminine leadership styles also relates to the perception of a manager's identity, but differently for male and female managers. For women, femininity only contributes to the more feminine-typed styles when they also have masculine characteristics. For male managers, there seems to be a tendency for femininity to be predictive of feminine-typed leadership styles. However, the relationship between a male manager's perceived identity and his leadership styles is not so strong. Both masculine, feminine, and androgynous individuals are rated more charismatic and people-oriented than undifferentiated individuals. Feminine male managers, and, to a lesser extent masculine and undifferentiated male managers, are rated more empowering than androgynous male managers.

#### 4.4 Discussion and Conclusion

In this chapter it was investigated whether sex differences in leadership styles are moderated by the context in which male and female leaders work. Considering the normative pressures that men and women face to conform to gender roles, it was predicted that overall female leaders, compared to male leaders use more stereotypically feminine styles and less stereotypically masculine styles. However, it is argued that organizational factors, such as the gender-typing of the work context, can be important moderators of both leadership behavior and of gender differences herein. There is little empirical research that has *explicitly* focused on the impact of gender-typing of organizational contexts on leadership styles of men and women. From reviews on gender differences in leadership styles, comparing studies with a diversity of research questions and methodologies (Chapter 2; Butterfield & Grinnell, 1999; Eagly, Johannesen-Schmidt, Van Engen & Vinkenburg, in preparation; Eagly and Johnson, 1990), the expectation was deduced that gender-typing of the immediate work context influences the leadership styles of male and female managers. More specifically, the hypotheses was tested that male and female managers are more people-oriented, more empowering, more charismatic, and less task-oriented when leading in a feminine-typed context, and less people-oriented, less empowering, less charismatic, and more task-oriented when leading in a masculine-typed context.

There was no evidence to support the first hypothesis, that female managers, in comparison with male managers, use people-oriented, charismatic and empowering leadership more, and task-oriented leadership less. Shop assistants rated their male and female managers in the same way. The second hypothesis, that the gender-typing of the context influences leadership behavior was also rejected. These results differ from the findings published by Gardiner and Tiggemann, who found that female managers adapt their style to the organizational context. Female managers showed more people-oriented behavior in female-dominated settings and more task-oriented behaviors in male-dominated industries than.

There are a number of possible explanations for the difference between the findings of Gardiner and Tiggemann and our findings. First of all, the male- and female-dominated contexts in their study differed on more organizational factors than gender-typing alone. Their results may stem from these differences in organizational factors. Secondly, the behavior in our study was measured through subordinates' perceptions, whereas the Gardiner and Tiggemann study used self-ratings. Although no evidence was found for type of rater in the meta-analysis reported in Chapter 2, the earlier meta-analysis by Eagly and Johnson (1990) found that self-reports are often more stereotypical than behavioral ratings by others. Carless (1998), Lewis and Fagenson-Eland (1998), and Korabik, Baril and Watson (1993) explicitly tested whether rater type influenced leadership ratings and found that self-ratings were more stereotypical in comparison with ratings by subordinates, by supervisors, and by observational ratings, respectively. Apparently, women describe themselves as more feminine in their leadership than others do. Therefore, the fact that we did not use self-reports but ratings by subordinates may explain partly why we did not find differences between men and women.

Although the managers of different departments clearly varied in leadership styles as perceived by their subordinates, no indication was found that the gender-typing of the department affected the leadership styles of the managers (Hypothesis 2). Managers in feminine-typed departments were not more people-oriented, more charismatic, more empowerment or less task-oriented leadership styles than managers in masculine-typed departments, as was expected. We did find, however, an unexpected effect of the site of the department store. So, we are left with the paradoxical situation of finding no evidence for the predicted effect of organizational context, and finding unexpected support for another.

The fact that no effect was found for gender-typing of the department (Hypothesis 2) suggests that the gender-typing of the department may not be as crucial as other organizational factors that are gendered. For instance, it is possible that the division into feminine-typed and masculine-typed departments may be overruled by the feminine connotation of shopping itself. The more stereotypical feminine values of client friendliness and servitude to customers are important for both the feminine-typed and the masculine-typed departments. On the other hand, according to Maier's (1999) typology of masculinist and feminist organizational substructures, this retail organiza-



tion with its hierarchical structure fits the masculinist type. Servitude to customers and client friendliness all serve the stereotypical masculine goals such as profit and competition. That this organization is not atypical for organizations in general also follows from the fact that De Vries (1997) found similar ratings of people-oriented leadership and task-oriented leadership in samples in insurance companies, municipalities and a cross-sectional sample in the Netherlands. Nevertheless, in the pilot study, reported in Chapter 3, it was found that the different departments varied on our measure of gender-typing. This finding pleads against the overruling by the supposedly feminine shopping context or the masculinist substructure of this organization.

Other gendered organizational factors than the immediate work environment may be more important moderators of leadership behavior of male and female managers. In the Gardiner & Tiggemann study, for example, it is likely that the organizations of the male-dominated industries they studied (automotive industry, timber industry, management and accounting consultancies, academia and information technology) are larger and perhaps more hierarchically structured than the organizations of the female-dominated industries (hairdressing, early childhood education, and nursing). This presumably creates a different organizational culture and climate.

Organizational culture per se is possibly an important factor in the present study. Although the department stores were taken from a single retail organization and were organized along a tight, uniform concept, the strongest effects came from the differences between the four department stores with respect to the people-oriented, charismatic and empowerment leadership styles of the managers working there. This is all the more surprising, considering the facts that managers in this retail organization receive centralized training and regularly switch between department stores (and that all the four stores had male business leaders). The strong effect of the site of a department store on leadership styles could be a result of the organizational culture, or even of the larger context of the city. Etiquette, for example the (in)formality of relationships between business leaders, department managers and shop assistants, varied from store to store. Business leaders may have set a different standard of leadership styles. One business leader, for example, reinforced an 'open door' policy, whereas another was outspokenly bossy and feared by their personnel. An alternative explanation for the department store differences may be the culture of the city in which the department stores are situated. The people of Rotterdam for example, are known, as witnessed by their city's anthem 'no words, but deeds', to be hard working 'no nonsense' workers.

Finally, another important organizational factor that was held constant in the present study but may be critical in (moderating sex differences in) leadership behavior is the hierarchical level that is studied. Bass, Avolio, and Atwater (1996) reported more transformational leadership of female managers in a sample of high level leaders of Fortune 50 companies, but found smaller sex differences for leaders of small businesses and hardly any differences in a large sample of leaders of all levels. A possible explanation put forward by these authors is that the female executives of the Fortune 50 com-

panies are exceptional. Having faced more barriers than their male counterparts, the few women who have reached the top are outstanding and therefore particularly transformational. An alternative explanation is that women in executive positions, where being a woman is particularly salient, act more feminine in order not to violate existing normative expectations. Women who violate existing normative expectations run the risk of being penalized (Rudman, 1998; Carli, 1990). Executive female managers and female leaders who want to reach the top in particular, may therefore strive to display behavior that is both sufficiently managerial and sufficiently feminine. Future research need to examine how expectations of leader behavior and gender-role behavior influence promotion opportunities for male and female managers and whether these expectations differ for line-, middle-managers and managers in executive positions.

It was expected that gender stereotypes bias perceptions of the manager in case of limited information about the behavior of a manager (Hypothesis 3). More specifically, it was argued that subordinates with limited individuating information form an impression of their manager by means of the available cues they have – in this case a manager's sex and the gender-typing of the context. In comparison with judgments by individuals who know their manager well, it was predicted that sex stereotypes would influence perceptions of leadership by individuals who have limited opportunity to form an accurate perception of their manager. The extent to which a rater has the opportunity to form an accurate opinion of a manager's leadership style was measured by the number of hours a shop assistant works. Shop assistants working four hours a week have relatively few contacts with their manager and as a consequence have less individuating information compared to shop assistants working 40 hours or more.

In gender-role congruent situations and under limited information conditions, we expected leadership perceptions to be biased towards gender stereotypes. No evidence was found for such an effect in the present study. Thus, Hypothesis 3a was rejected. Furthermore, for gender-role incongruent situations we predicted that judgments by raters who have little individuating information would be contrasted to gender stereotypes, resulting in gender-atypical judgments. This hypothesis (3b) was only corroborated for ratings of task-oriented leadership of female managers. In the more gender-role incongruent departments, managers were rated more task-oriented. However, for male managers an assimilation effect was found in the gender-role incongruent situation, which was the opposite from the prediction. Both male and female managers were perceived to be more task-oriented in gender-role congruent situations. Furthermore, it was found that amount of contact influenced the perception of people-oriented leadership, task-oriented leadership and empowerment. When shop assistants have more contact with their manager, they rate their manager as more people-oriented and less task-oriented and there is a tendency to judge the manager to be more empowering as well.

Although there is mixed support for Hypothesis 3b, taken together, the results suggest an alternative interpretation. First of all, it is likely that the relationship



between shop assistants and their manager becomes more personal as they work longer together. As a consequence, managers may use the feminine styles that emphasize maintenance of personal relationship more for the shop assistants who work longer hours – which is what was found. Furthermore, the finding that male and female managers are rated more task-oriented in gender-role incongruent situations can also be a result of managers actually *behaving* more task-oriented in gender-role incongruent situations towards subordinates who work for a limited amount of hours. It can be argued that the incongruent situation asks for an impression management strategy. In research by Johnson (1993), it was found that both male and female managers displayed more task-oriented behavior with opposite-sex subordinates than with same-sex subordinates. According to Johnson, male and female managers ‘may have felt slightly more uncomfortable with, and especially leading members of the opposite sex. Thus they may have tended to maintain control in an uncertain situation by being more directive, asking more questions, and offering fewer opinions’ (p208). In the present case of the shop assistants who work for a limited number of hours a week, for a male manager running the baby clothes department, or a female manager administering the electronic equipment department, managers may need to deploy a more task-oriented leadership style.

The number of work hours therefore may not have been a valid indicator of the ability to form an accurate impression of a manager. However, a considerable part of the questionnaires were filled out in the presence of the experimenter and shop assistants were asked to comment on their participation in the study. More hesitation and ‘guessing’ were observed from shop assistants working limited hours on a short-term temporary base, and more certainty by experienced employees. This suggests that the number of working hours *is* a valid indicator for measuring snap judgments.

The last question that was addressed in this chapter was whether perceived gender identity was related to the perception of leadership styles. Earlier research (Korabik, 1982; Korabik et. al., 1987; 1992; 1994; Inderlied & Powell, 1979) has shown that a manager’s gender identity is a strong predictor of leadership styles. In fact, masculinity and femininity have been shown to be stronger predictors of leadership style than a manager’s sex. However, most previous research related manager’s self-rated gender identity to leadership styles, whereas in the present study subordinates were asked to form an impression of their manager’s identity. We argued that it is likely that sex stereotypes would trickle down in the dispositional inferences made of the managers.

In support of earlier research, we too found that gender identity was a strong predictor of leadership styles and we also found the effect of perceived gender identity to be far more substantial than that of a manager’s sex. Masculinity related to the perception of task-oriented leadership behavior. The more a manager was described to have typical masculine characteristics, the more instrumental leadership behavior was attributed to the manager.

The perception of stereotypical feminine leadership styles was also related to the



perception of a manager's identity. Femininity correlated with people-oriented, empowering, and charismatic leadership. Manager's sex and masculinity further qualified the relation between femininity and the stereotypical feminine leadership styles. For women, femininity contributed to people-oriented and charismatic leadership *only* when female managers were also perceived to be masculine at the same time, i.e. when they were androgynous managers. Furthermore, masculinity hardly contributed to the perception of empowerment for female managers. For male managers, femininity was the only important predictor for people-oriented leadership, i.e. masculinity hardly contributed to this interpersonal leadership style. Femininity also predicted charismatic and empowerment of male managers, but masculinity as well. Feminine, masculine and androgynous male managers were rated more charismatic, and empowering than undifferentiated males.

It can be concluded that also in the eye of the beholder, gender identity is an important predictor of leadership style. So far, the results do not differ from the research that focused on self-descriptions of gender identity. We did find however, that for stereotypical feminine styles, the relation between femininity and leadership styles was moderated by the sex of the manager. Apparently, in the perception of shop assistants, female managers need both feminine and masculine characteristics. This result can also be interpreted as an indirect evaluation of a manager. As both initiating structure and consideration are thought to be necessary for managerial effectiveness (Powell, 1988; Sargent, 1981; Stogdill, 1974), the results suggest that androgyny is beneficial, especially for women. Evidently, femininity is not perceived to 'be enough' for female managers to be attributed stereotypical feminine leadership styles. Whether androgynous female managers are also evaluated more positively, is studied in the next chapter.

## Chapter 5

### Evaluation of Managers: Satisfaction and Effectiveness\*

\* The results of this chapter were partly presented as:

Engen, M. L. van, & Willemsen, T. M. (1999, July). *Gendered differences in leader behaviour and effectiveness: Fact or fiction?* Poster presented at the General Meeting of the European Association of Experimental and Social Psychology (EAESP). Oxford, UK, 6-11 July.

The subject of this chapter is the evaluation of the department managers' performance. Performance is measured in two ways. First, it is studied how *satisfied* shop assistants are with their manager's performance. Second, a manager's *effectiveness* is examined by means of the departmental performance. The research questions are: Do male and female managers differ on these measures of evaluation? To what extent does the gender-typing of the context moderate satisfaction with and effectiveness of male and female managers? To what extent are satisfaction with and effectiveness of male and female managers moderated by the gender-congruency of the leadership style used by a manager? And, finally, does the perceived gender identity of the manager influence ratings of satisfaction and effectiveness?

### 5.1 Introduction

As was argued in Chapter 1, the main cause for sex discrimination in management positions lies in the perceived mismatch between leader roles and gender roles. Research investigating the correspondence between requisites of successful managers and stereotypical traits ascribed to women and men has shown repeatedly that the expected characteristics of men and successful managers are similar, i.e. both are ascribed agentic attributes, but diverge from expectancies about typical communal attributes of women (Brenner, Tomkiewicz & Schein, 1989; Schein, 1973; Schein & Mueller, 1992; Schein, Mueller & Jacobson, 1989). Moreover, female leaders are not merely perceived as managers but as female managers. Normative expectancies about the typical attributes of women may influence peoples' perception of female managers and may also work as self-fulfilling prophecies, which is referred to as the gender-role spillover (Nieva & Gutek, 1981). Although in general female stereotypical traits (warm, sensitive, tactful and supportive) are more positively evaluated than male stereotypical traits (competitive, rational and independent) (Eagly, Mladinic & Otto, 1991), the latter traits are valued more when it concerns leaders (e.g. Schein, 1973; Schein & Mueller, 1992). For instance, in opinion polls both men and women express a preference for a male leader (e.g. Gallup, 1996; Rubner, 1991).

Evidence for a perceptual bias against female leaders is found in experimental research, in which respondents are asked to evaluate a male or female leader of whom the behavior or outcomes is equated. In an early study, Rosen and Jerdee (1973) asked respondents to evaluate the effectiveness of managerial behavior described in written vignettes. Other researchers, for instance Lee and Alvares (1977), trained confederates to supervise a number of respondents on a simulation task and asked the respondents to evaluate the confederate. Eagly, Makhijni and Klonsky (1992) reviewed 61 of such experiments and found an overall tendency to devalue female leaders. The evaluation bias was more pronounced to the extent that the female managers behaved in more stereotypically masculine ways, occupied male-dominated positions, when the raters were men, when the raters were non-managerial, when there were more men among the leaders, but when there were more women among the subordinates of the leaders.



Considering these evaluative biases that female leaders face, women who have attained leadership positions in organizations may be more effective than comparable men in their positions, as women may have to outperform men to be seen as equally competent (Biernat, 1995; Foschi, 1996; Kanter, 1977). Female organizational leaders may actually be evaluated more positively than their male counterparts. Eagly, Karau and Makhijani (1995) reviewed 96 studies, mostly organizational studies, that compared men and women on some measure of effectiveness (e.g. satisfaction, objective performance evaluation, or subjective performance evaluation). In general, there was no evidence that men and women differed in effectiveness, neither on objective, nor on subjective performance measures. However, female leaders fared better on satisfaction ratings, whereas men fared better on performance ratings. Female leaders were also rated more effective in comparison with men when they were rated by their subordinates or by judges, whereas men were rated more effective when they were rated by supervisors, peers or themselves. Thus, a leader's evaluation partly depends on by whom and by what criteria the leader is evaluated. A related conclusion can be drawn from a recent meta-analysis on sex differences in performance evaluations in field studies by Bowen, Swim and Jacobs (2000). They found that masculine-typed performance measures, such as performance ratings of planning and implementation, resulted in more favorable evaluations of men, whereas more feminine-typed performance measures such as communication and interpersonal sensitivity skills resulted in more favorable evaluations of women.

In the present study, the evaluation of the performance of a manager was investigated in two ways. First, shop assistant rated their satisfaction with the manager. Second, the departmental performance outcomes (turnover, consumer satisfaction with the service and costs of sick-leave) were used as measures of effectiveness. It is hypothesized that female managers receive higher satisfaction ratings than male managers (Hypothesis 1.A). As the present study explored actual performance outcomes instead of performance ratings, it is less clear what effect to predict for the actual performance of a department. Assuming that performance ratings relate to actual performance of a workgroup, it is hypothesized that male managers are more effective in terms of departmental outcomes in comparison with their female counterparts (Hypothesis 1.B).

Sex of the rater may also influence the evaluation of male and female leaders. Both in the above mentioned meta-analysis on organizational leaders (Eagly, Karau & Makhijani, 1995), and in the meta-analysis by Davison and Burke (1999) on sex discrimination in simulated employment contexts, it was found that male raters favored male leaders, whereas female raters favored female leaders. This so-called 'similarity bias' was also found by Luthar (1996) in an experimental setting on the effectiveness of male and female autocratic or democratic leaders, and by Fields and Blum (2000) in a telephone survey study among 1388 employees. Therefore it is predicted that female raters, compared to male raters, evaluate female managers more favorably, whereas male raters, compared to female raters evaluate male managers more favorably (Hypothesis 2).

*Context effects in evaluation*

Eagly, Karau and Makhijani (1995) found that the gender-role congruity of a leader role moderated the leader's effectiveness on a number of moderator variables: (a) male leaders were more effective in military settings, whereas female leaders were more effective in educational and governmental or social service settings; male leaders were more effective to the extent that (b) the leadership role was male-dominated and (c) leaders had more male subordinates, (d) there were more men among the raters of a leader and (e) male leaders fared better to the extent that raters described the leader role as more congenial to men than to women.

These results suggest that in contexts in which leaders are 'out of role', such as women in the military, or men in social service, the evaluation of the performance of leaders deteriorates. However, several moderating factors of performance evaluation are more often than not confounded. For instance, the fact that female leaders are devaluated most in military settings, may be attributed to the top-down, masculine-typed organizational structure and culture, to the male-dominated sex-ratio among the leaders and subordinates, or to the sex of the rater (mostly male). Considering the large heterogeneity of the studies included in the meta-analysis, the diverse methodologies used by different researchers and the overlap between classes of moderating variables, a study in which this gender-role congruity hypothesis is tested more formally is important. Although the body of research on the evaluation of organizational leaders is extensive, no study was found that explicitly examined the impact of the gender-typing of the context on leader effectiveness.

In the present study it is tested whether the evaluation of male and female managers is influenced by the gender-role congruity of the immediate working context of a manager. Male and female managers of differently gender-typed sales departments in department stores are studied. The study is set-up as a quasi-experiment; i.e. the male and female managers lead departments that were similar in most other respects, except for its gender-typing. Department stores accommodate both 'masculine-typed' and 'feminine-typed' departments. Electronics, outdoor- and sports departments are examples of masculine-typed departments. Departments with a feminine connotation are for instance women's fashion, cosmetics, and lingerie. It is hypothesized that female managers leading masculine-typed departments will be devaluated compared to female managers leading a feminine-typed department, whereas male managers leading a feminine-typed department will be devaluated compared to male managers leading a masculine-typed department (Hypothesis 3A).

Although both men and women may face a less favorable evaluation when in gender-role incongruent settings, there is evidence to suggest that there is an asymmetry in the severity of the consequences of being out of role. Male nurses, for instance, more often feel advantaged and valued in their token or minority position among female nurses, whereas female police officers more often feel excluded and even harassed among their male colleagues (Ott, 1985). Furthermore, leadership has a masculine connotation



per se (e.g. Brenner, Tomkiewicz & Schein, 1989; Schein, 1973; Schein & Mueller, 1992) and being a man in a leader role, even in feminine-typed contexts may not be considered out of role. Thus, the interaction effect between gender-typing of the context and manager sex is expected to be qualified by an asymmetry effect (Hypothesis 3B).

#### *Role-(in)congruent leadership styles*

In Chapter 4 no evidence was found that male and female managers in department stores are perceived differently in terms of leadership styles. However, this does not mean that the men and women showing the same styles are evaluated equally. According to the gender-role congruency hypothesis (Johnson, 1976; Nieva & Gutek, 1981), and role congruity theory of prejudice against female leaders (Eagly & Karau, 2001) gender-role congruent behavior will be more favorably evaluated than gender-role incongruent behavior.

In fact, experimental studies indicate that identical styles may be evaluated differently when exhibited by a man or a woman. In a meta-analysis of vignette type experimental studies that appeared prior to 1988, Eagly and colleagues (1992) found that female leaders were devalued compared to male leaders when the leadership was carried out in a stereotypically masculine way, particularly when their leadership style was autocratic or non-participative.

In a recent experiment Luthar (1996) found just the opposite result for autocratic leadership rated by undergraduate business students. Female leaders that behaved autocratically were evaluated more favorably than male autocratic leaders. However, this effect was qualified by rater sex. Female raters rated the female autocratic leaders more positive, whereas no such effect was found for male leaders. Moreover, both male and female democratic leaders were evaluated more favorably than autocratic leaders. Rojahn and Willemssen (1994) did find evidence for a role-congruity effect on the effectiveness of male and female managers, but only for male raters. They presented male and female undergraduates with a one-page vignette of task-oriented or people-oriented leader. Male raters rated a task-oriented female leader as less effective than her male counterpart, whereas the people-oriented female leader was rated more effective than her male counterpart. On a different measure of evaluation, namely likeability, no gender-congruency effects were found.

Korabik, Baril and Watson (1993) observed management students who took part in a role-play simulation of an organizational conflict. Although the male and female leaders did not differ in their conflict resolution styles and the outcomes of the conflict, females using a dominating style were evaluated less favorably than males using the same style. Male leaders using stereotypically feminine style were rated less favorably. Jago and Vroom (1982) asked participants of a management-training program to rank all members of the group on autocratic leadership and subsequently to give evaluative judgments on each member of the group. They found that male leaders were evaluated positively, whereas female leaders were rated negatively, when using an autocratic leadership style.



There are not that many field studies on the gender-role congruency effect of leadership styles. Petty and Lee (1975) studied the evaluation of male and female supervisors in academic institutions. They found that overall interpersonal leaders elicited greater satisfaction than task-oriented leaders. This relation was stronger for female leaders, suggesting a gender-congruency effect. Similarly, in a study by Pratch and Jacobowitz (1996) on the evaluation of student facilitators of MBA programs, it was found that female leaders were evaluated more negatively than male leaders when exhibiting an agentic leadership style. Ragins (1989), on the other hand, did not find evidence for a gender-role congruency effect for the power bases used on the evaluation of the manager's effectiveness. Ragins investigated 55 matched pairs of male and female managers of three government owned research and development organizations. Subordinates of these managers rated their manager on the use of stereotypically masculine or stereotypically feminine power bases and they rated their manager's effectiveness. Osborn and Vicars (1976) also did not find evidence for a gender-role congruency effect in the evaluation of male and female managers of two mental health organizations.

Summarizing, there is mixed evidence for a gender-role congruency effect of leadership styles in research in organizations. To be able to understand the organizational conditions that engender a gender-role congruency effect, research is needed that studies the gender-role congruency hypothesis in different organizational contexts, such as at a macro-context (e.g. sector of industry), at a meso-context (e.g. level of leadership, type of organization or type of job) and at a micro-context (e.g. the immediate working context of a manager). A gender-role congruency effect of leadership styles may only operate at some of these contexts. The present study tests the gender-role congruency hypothesis of leadership styles at the micro-level of the leader. It is studied whether gender-role incongruent styles by managers of a department in a single organization results in less favorable evaluations than gender-role congruent styles. More specifically, it is hypothesized that male managers are evaluated more favorably when they display task-oriented leadership and less favorably when they display people-oriented, charismatic and empowering leadership, whereas it is hypothesized that female managers are evaluated less favorably when they act more task-oriented, but less people-oriented, charismatic and empowering (Hypothesis 4A).

Furthermore, it is often shown that role-incongruent behavior may not be as consequential for men as for women. Thus, violations of gender-role prescriptions lead to more penalties for women than for men (Rudman, 1998; Branscombe, Crosby & Weir, 1991; Van Engen, 1999). The boundaries for acceptable behavior by men seem broader and less well-defined than those for women. The predicted gender-role congruency effect on the evaluation of male and female managers may therefore be further qualified by an asymmetry effect. The devaluation of managers who display gender-role incongruent leadership styles will be stronger for female than for male managers (Hypothesis 4B).

*Perceived Gender Identity*

A manager's identity in terms of masculinity and femininity has been shown to relate to the use of leadership styles (Chapter 4; Hackman, Furniss, Hills & Paterson, 1992; Korabik, 1982; Korabik & Ayman, 1987). More specifically, masculinity is related to leadership styles that bear a masculine connotation, such as task-oriented leadership, whereas femininity is related to stereotypical feminine leadership styles, such as people-oriented leadership and transformational leadership. Therefore, androgynous leaders, who combine high femininity with high masculinity, can be expected to perform high on both people-oriented and task-oriented leadership styles. Furthermore, both masculinity and femininity have been shown to contribute to transformational leadership. Gender identity is also a more powerful predictor of the use of leadership styles than biological sex (Chapter 4; Korabik, 1992; Korabik & Ayman, 1987).

As both stereotypical masculine and stereotypical feminine leadership styles are thought to be necessary for effective leadership (Korabik & Ayman, 1987; Powell, 1988; Sargent, 1981; Stogdill, 1974) it may be expected that androgynous managers are evaluated more favorably than gender-typed (masculine or feminine) and undifferentiated individuals. However, research on the evaluation of managers that differ in gender identity is inconsistent. Hackman, Hills, Paterson and Furniss (1993), for instance, found that masculinity contributed to ratings of effectiveness for male and female leaders. However, femininity did not relate to ratings of effectiveness for female leaders, but did lead to perceived effectiveness for male leaders. Thus, whereas androgyny related to effectiveness for male leaders, masculinity related to effectiveness for female leaders. Furthermore, on ratings of satisfaction, Hackman et al. found that raters were most satisfied with both male and female androgynous leaders.

Baril, Elbert, Mahar-Potter and Reavy (1989) on the other hand, showed that androgynous and undifferentiated first-line supervisors were *least* effective. They also found that masculine female leaders were evaluated more favorably than feminine female leaders. The latter study clearly contrasts with the earlier mentioned gender-role congruency perspective. In fact, a contrast effect in the evaluation of female managers was found, i.e. masculine female managers were evaluated more effective. Maurer and Taylor (1994), who studied the performance ratings of male and female instructors of introductory psychology classes also found a contrast effect on performance ratings of female leaders. They conceptualized masculinity and femininity as a bipolar dimension, therefore excluding the possibility of androgynous leadership. Maurer and Taylor (1994) found that the performance of female instructors was higher when the students described her in more masculine as opposed to feminine terms.

Schein and her colleagues (Schein, 1973; Schein, et al., 1989; Schein, et al., 1992) have demonstrated that masculine traits are associated with successful managers. In more recent years female raters also attribute feminine traits to successful managers (Brenner, Tomkiewicz & Schein, 1989; Rojahn, 1996), but in general the leader role is still masculine-typed. Powell and Butterfield (1979; 1989) also found that the proto-



typical manager was viewed as predominantly masculine, whereas 'bad managers' were described as undifferentiated (Powell & Butterfield, 1984). Arkkelin and Simmons (1985) found in their research that the respondents (undergraduates) did not offer androgynous characteristics of the good manager when asked to describe one, but 'responded equally favorably to managers *described to them* in androgynous as in masculine terms' (p.1195). Thus, thinking about an ideal manager is something different from evaluating a manager, even in a paper and pencil test.

Korabik and Ayman (1994) argued that these inconsistent results may stem from the different measurement instruments that were used. Studies examining the relation between gender-role characteristics and successful managers in general find results in the direction of favorable perceptions of masculinity (e.g. Schein, 1973; Schein et al., 1989, 1992; Powell & Butterfield, 1979, 1984, 1989). Studies on subordinate satisfaction in general report more favorable evaluations for androgynous compared to gender-typed leaders (e.g. Hackman, Hills, Paterson and Furniss, 1993; Korabik & Ayman, 1994). Finally, studies on performance ratings in general show a gender-contrast effect for female leaders, i.e. masculine leaders perform better (Baril, Elbert, Mahar-Potter & Reavy, 1989; Maurer & Taylor, 1994). In the present study it is therefore hypothesized that androgynous male and female managers are evaluated more favorably on ratings of satisfaction (Hypothesis 5A). On effectiveness measures, it is predicted that masculine leaders perform better than feminine, androgynous or undifferentiated individuals (Hypothesis 5B).

## 5.2 Method

In the following, the sample, the dependent and independent variables and the respondents of this study will be briefly introduced. For a more detailed description of respondents, study design and instrument properties, the reader is referred to Chapter 3.

*Respondents.* Respondents were 327 shop assistants (253 women and 74 men) of four large department stores of one retail organization in the Netherlands. Every department store comprises of approximately 20 separate departments, such as the electronic equipment department, the furniture department, the lingerie department or the ladies fashion department. Respondents received a questionnaire that was developed to measure the perception and evaluation of their department manager (40 men and 30 women). Simultaneous with the collection of the questionnaire data, performance data (turnover, service and sick-leave) for the departments were collected.

*Independent Variables.* Independent variables were the gender-typing of the department, the leadership styles as perceived by the shop assistants, the manager's gender identity as perceived by the shop assistant, sex of the manager and sex of the shop assistant. Every department was attributed a gender-type score ranging from very feminine-typed to very masculine-typed on the basis of a pilot-study measuring people's general ideas on the 'maleness' or 'femaleness' of the different departments. The shop assistants described their department manager (40 men and 30 women) on 40 Likert-type items



representing four leadership scales: (a) people-oriented leadership, (b) task-oriented leadership (c), charismatic leadership, and (d) empowerment. Shop assistants also described their manager in terms of 15 feminine- and 15 masculine Likert-type items representing masculinity and femininity.

*Dependent variables.* Dependent variables were shop assistant's satisfaction with their department manager and three indices of the departmental performance. Satisfaction with the manager was measured by scale that consisted of 4 Likert-type items in which shop assistants gave their evaluation of, and satisfaction with, the manager's performance. The departmental performance was measured by (a) the percentage of the actual turnover as compared to the budgeted turnover; (b) the customer satisfaction; and (c) the percentage of the departmental costs that was spent on sick-leave. All performance data pertain to the month in which the questionnaire data were collected. No customer satisfaction data were available for the departments of the store in The Hague.

*Statistical Analyses.* In this chapter, two types of statistical analyses were used. Multilevel Random Coefficient Models (MRCM) were used for testing the hypotheses concerning satisfaction with the manager. Ordinary Least Squares regression analyses (OLS) were used for testing the hypotheses concerning the departmental performance. As far as satisfaction with the manager is concerned, the present study demonstrates a hierarchical data structure in which the variables were measured at different (nested) levels. At Level-1 the shop assistant sex, perceived leadership styles, perceived gender identity and satisfaction with the manager were measured. At level 2 there is the manager's sex and the gender-typing of a department. Finally, all departments are nested within four department stores. The nesting of these variables is likely to cause dependency among the data, i.e. shop assistants have their working context (a particular department) and their manager in common. The use of MRCM models this dependency and is therefore the most proper instrument.

Departmental performance is measured at the department level. Instead of the 327 performance ratings, as was the case for shop assistant satisfaction, the units of analysis are the 70 ratings for each of the three performance measures. In order to predict the departmental performance, the variables that are measured at the shop assistant level (the four leadership styles and the two gender identity scales) are aggregated. The average perceptions of the leadership styles and the gender identity of the manager, i.e. the mean perception of all shop assistants within a department, are subsequently used as predictors for the departmental performance<sup>1</sup>. As both the predictor variables (i.e. gender-type of department, leadership styles, manager sex and gender identity) and the criterion variables (i.e. customer satisfaction, turnover performance and sick-leave) are at the same (departmental) level, the hypotheses for the performance measures will be tested by means of (OLS) regression analysis.

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<sup>1</sup> As was discussed in Chapter 3, we decided not to use the aggregated variable 'sex of rater'. The resulting sex-composition of the raters was unreliable due to the low response rate.

### 5.3 Results

#### 5.3.1 Satisfaction with the manager

##### *Preliminary analyses*

The first model to be estimated is the base-line model that serves as the reference model for all subsequent models testing the hypotheses (see Chapter 3, statistical analysis). Akin to Chapter 4, two basic models are estimated:

$$(\text{SATISFACTION})_{ij} = \delta_{00} + u_{0j} + e_{ij} \quad (5.1)$$

$$\begin{aligned} (\text{SATISFACTION})_{ijk} &= \gamma_{00k} + u_{0jk} + e_{ijk} = \\ &\delta_{000} + \delta_{001}(\text{THE HAGUE}) + \delta_{002}(\text{NIJMEGEN}) + \delta_{003}(\text{TILBURG}) + u_{0jk} + e_{ijk} \end{aligned} \quad (5.2)$$

where the indices  $i$ ,  $j$ , and  $k$  refer to shop assistant  $i$  of department  $j$  in department store  $k$ . In the Two-Level Intercept-Only Model (5.1) the total score in SATISFACTION is split into a grand mean  $\delta_{00}$ , a department specific deviation of the department mean from the grand mean  $u_{0j}$ , and a shop assistant specific residual  $e_{ij}$ . In the Three-Level Conditional-Intercept model (5.2),  $\delta_{000}$  is the grand mean of the department store in the city of Rotterdam, which was chosen as the 'baseline store'. THE HAGUE, NIJMEGEN and TILBURG are dummy variables indicating the other cities where department stores are located. The parameters  $\delta_{001}$ ,  $\delta_{002}$  and  $\delta_{003}$  represent the estimated deviation from the 'baseline store' Rotterdam. The  $u_{0j}$  's are the department specific deviations (of the department mean) from the grand mean, and the  $e_{ij}$  's are the shop assistant specific deviations of the individual score from the department mean or grand mean (the 'residuals'). Table 5.1 presents the results of the models (5.1) and (5.2) for the variable 'satisfaction with the manager'.

The intra-class correlation of the Intercept-Only model (5.1) is .254 which implies that more than 25% of the total variance in shop assistants' satisfaction with their manager is variance that is between the higher level units (the departments). Part of this higher level variance can be attributed to differences between the stores; The intra-class correlation resulting from the 2-level model decreases from  $r = .254$  to  $r = .160$  in the three-level model. The deviance of the three-Level Conditional-Intercept model (5.2) for shop assistants' satisfaction with their manager is significantly smaller than that of the Two-Level Intercept-Only model (5.1) ( $\chi^2 = 16.93$ ,  $p < .0007$ ), showing that the three-Level model represents the better baseline model for the variable satisfaction with the manager. The department store specific deviations  $\delta_{001}$ ,  $\delta_{002}$  and  $\delta_{003}$ , show that shop assistants in the Rotterdam store are the least satisfied with their manager, followed by the shop assistants in Tilburg and The Hague. Finally, the shop assistants in Nijmegen are the most satisfied with their manager<sup>2</sup>. Model (5.2) will be used as the baseline model to which all subsequent models concerning shop assistant's satisfaction with their manager will be compared<sup>3</sup>.

Table 5.1  
Estimated Satisfaction with the Manager: Two-level-Intercept-Only model and Three-level Conditional-Intercept model

| Parameters                                    | Estimate (standard error) |                          |
|---|---------------------------|--------------------------|
|   | 2-Level                   | 3-Level                  |
| <i>Fixed Parameters:</i>                      |                           |                          |
| - Intercept, $\gamma_{00}$                    | 4.895 (.135)              |                          |
| - baseline ROTTERDAM $\delta_{000}$           |                           | 4.184 (.230)             |
| Store deviations from baseline (Level-3):     |                           |                          |
| - THE HAGUE, $\delta_{001}$                   |                           | .969 (.353)**            |
| - NIJMEGEN, $\delta_{002}$                    |                           | 1.420 (.329)***          |
| - TILBURG, $\delta_{003}$                     |                           | .544 (.309) <sup>#</sup> |
| <i>Variance Components:</i>                   |                           |                          |
| Department variance (Level-2):                |                           |                          |
| - (conditional) intercept, $\omega_0^2$       | .677 (.209)               | .381 (.150)              |
| Shop assistant variance (Level-1):            |                           |                          |
| - residual, $\sigma^2$                        | 1.989 (.173)              | 2.002 (.173)             |
| (Conditional) intra-class correlation, $\rho$ | .254                      | .160                     |
| Model deviance (-2 log likelihood)            | 1211.79                   | 1194.86                  |

Note. <sup>#</sup>  $p < .10$ , \*\*  $p < .01$ , \*\*\*  $p < .001$ .  
Satisfaction ratings range from 1 (not satisfied at all) to 7 (very satisfied).

Manager Sex and Gender-Typing of Departments

The first three hypotheses concerning the impact of leader manager sex, shop assistant sex and gender-typing of the department and their interactions are simultaneously tested in a single model. At the shop assistant level (Level-1), sex of the shop assistant was included in the model, as follows:

$$(\text{SATISFACTION})_{ijk} = \beta_{0jk} + \beta_{1jk} (\text{SA SEX})_{ijk} + e_{ijk}$$

(5.3)

where the indices *ijk* refer to the scores of shop assistant *i* of department *j* in department store *k* on the dependent variable SATISFACTION and the (Level-1) predictor variable shop assistant sex (SA SEX).  $\beta_{0jk}$  and  $\beta_{1jk}$  are department specific regression coefficients (intercept and slope) and  $e_{ijk}$  is the residual.

<sup>2</sup> Models with The Hague, Nijmegen or Tilburg as baseline instead of Rotterdam showed the same pattern. Differences between Tilburg and The Hague ( $t = 1.25, ns.$ ) and differences between The Hague and Nijmegen ( $t = 1.26, ns.$ ) were not significant, but all other comparisons were ( $t$ 's between 2.74 and 4.31).  
<sup>3</sup> Additional analyses were run with work hours and size of the department as predictor variables. None of these models found significant results for these parameters and are therefore not reported.



At the departmental level (Level-2), sex of the manager, the gender typing of the department and their interaction were included as predictor variables in the model:

$$\begin{aligned} \beta_{0jk} &= \gamma_{00k} + \gamma_{01k} (\text{MAN SEX})_{jk} + \gamma_{02k} (\text{GTD})_{jk} + \gamma_{03k} (\text{MAN SEX})_{jk} * (\text{GTD})_{jk} + u_{0jk} \\ \text{and} \\ \beta_{1jk} &= \gamma_{10k} + \gamma_{11k} (\text{MAN SEX})_{jk} + \gamma_{12k} (\text{GTD})_{jk} + \gamma_{13k} (\text{MAN SEX})_{jk} * (\text{GTD})_{jk} + u_{1jk}, \end{aligned} \quad (5.4)$$

in which  $(\text{MAN SEX})_{jk}$  stands for sex of the manager of department  $j$  in department store  $k$  and  $(\text{GTD})_{jk}$  stands for gender type of department  $j$  in department store  $k$ . The  $\gamma$ 's are the regression coefficients. The  $u_{nj}$ 's are department specific residual terms. The model actually estimated is the combined model, resulting from the substitution of the Level-2 model (5.4) and the Level-3 model (5.2) into the Level-1 model (5.3). This model is can be written as

$$\begin{aligned} (\text{SATISFACTION})_{ijk} = & \delta_{000} + \delta_{001}(\text{THE HAGUE}) + \delta_{002}(\text{NIJMEGEN}) + \delta_{003}(\text{TILBURG}) + \\ & \gamma_{01k} (\text{MAN SEX})_{jk} + \gamma_{02k} (\text{GTD})_{jk} + \gamma_{03k} (\text{MAN SEX})_{jk} * (\text{GTD})_{jk} + \gamma_{10k} (\text{SA SEX})_{ijk} + \\ & \gamma_{11k} (\text{MAN SEX})_{jk} * (\text{SA SEX})_{ijk} + \gamma_{12k} (\text{GTD})_{jk} * (\text{SA SEX})_{ijk} + \\ & \gamma_{13k} (\text{MAN SEX})_{jk} * (\text{GTD})_{jk} * (\text{SA SEX})_{ijk} + u_{0jk} + u_{1jk} (\text{SA SEX})_{ijk} + e_{ijk}. \end{aligned} \quad (5.5)$$

Parameter estimates, standard errors and the deviance for model (5.5) are presented in Table 5.2.A. In Table 5.2.B the expected values for male and female managers in more masculine and more feminine typed departments are presented. The sum totals for the individual predictor variables (i.e. the main effects of manager sex, shop assistant sex and gender-type of the department), and the sum totals for the two-way interaction effects (manager sex x shop assistant sex, gender-type of department x manager sex, and shop assistant sex x gender-type of department) are based on the estimation of more parsimonious models. The deviances of all estimated models are presented in Appendix 5.1.

Although the expected values for male and female managers (Table 5.2.B) show a tendency that shop assistants are more satisfied with male managers compared to female managers, this effect was not significant ( $t = .25$ , *ns.*). The model with sex of the manager as a single predictor for satisfaction (see model 4 in Appendix 5.1) also showed no significant effect for manager sex ( $t = -.80$ , *ns.*). Therefore, Hypothesis 1.A, that shop assistants are generally more satisfied with female managers, compared to male managers, is rejected.

Table 5.2.A shows that there is no evidence for female shop assistants to be more satisfied with female managers than with male managers, or for male shop assistants to be more dissatisfied with female managers compared to male managers (Hypothesis 2). The expected values in Table 5.2.B even show an opposite trend, that is, female managers are evaluated less favorably by female than by male shop assistants. The cross-level

Table 5.2.A  
*Estimated Satisfaction with the Manager by Sex of Manager, Gender-typing of Department and Sex of Shop Assistant*

| Parameters  | Estimate (standard error) |
|---|---------------------------|
| <i>Fixed Parameters:</i>  |                           |
| - baseline R'DAM $\delta_{000}$   | 4.354 (.377)              |
| - THE HAGUE, $\delta_{001}$   | .933 (.372)*              |
| - NIJMEGEN, $\delta_{002}$  | 1.441 (.335)***           |
| - TILBURG, $\delta_{002}$   | .527 (.314) <sup>#</sup>  |
| Department variables (Level-2):   |                           |
| - sex of the manager <sup>a</sup> , $\gamma_{01k}$  | .124 (.506)               |
| - gender-type of department <sup>b</sup> , $\gamma_{02k}$                                 | .016 (.259)               |
| - interaction sex $\times$ gender-type department, $\gamma_{03k}$                         | .392 (.390)               |
| Shop-assistant variables (Level-1):   |                           |
| - Sex of the shop assistant <sup>a</sup> , $\gamma_{10k}$                                 | -.118 (.365)              |
| Cross-Level Interactions:   |                           |
| - shop assistant sex $\times$ manager sex, $\gamma_{11k}$                                 | -.352 (.591)              |
| - shop assistant sex $\times$ gender-type department, $\gamma_{12k}$                      | -.086 (.295)              |
| - shop assistant sex $\times$ manager sex $\times$ gender-type department, $\gamma_{13k}$ | -.318 (.450)              |
| <i>Variance Components :</i>  |                           |
| Department variance (Level-2):  |                           |
| - intercept, $\omega_0^2$   | .374 (.316)               |
| - shop assistant sex /intercept, $\omega_{01}$  | -.143 (.345)              |
| - shop assistant sex, $\omega_1^2$  | .416 (.502)               |
| Shop assistant variance (Level-1):  |                           |
| -residual, $\sigma^2$   | 1.904 (.173)              |
| Deviance  | 1189.22                   |

Note. \*  $p < .05$ , \*\*\*  $p < .001$ , <sup>#</sup>  $p < .10$   
<sup>a</sup> Sex is dummy coded, 0 for men and 1 for women.  
<sup>b</sup> Negative values indicate feminine-typed departments; positive values indicate masculine departments (values between -1.82 to 1.88).

interaction effect of sex of the shop assistant and sex of the manager on shop assistant's satisfaction was, however, not significant ( $t = -.60$ ,  $ns$ ).

The predicted interaction effect of gender type of the department and sex of the manager on shop assistant satisfaction (Hypothesis 3A and 3B) was not significant ( $t = -1.01$ ,  $ns$ ). Female managers were not evaluated more favorably in feminine-typed contexts, nor were male managers evaluated more favorably in masculine-typed contexts.

Table 5.2.B  
*Expected Values for Satisfaction with the Manager as a function of Gender-Type of Department, Sex of the Manager and Sex of the Shop Assistant*

| Department <sup>1</sup> | Satisfaction   |      |                    |
|-------------------------|----------------|------|--------------------|
|                         | Manager        |      | Total <sup>2</sup> |
|                         | Shop assistant | Man  |                    |
| Feminine                |                |      |                    |
| Man                     | 4.33           | 3.93 | 4.04               |
| Woman                   | 4.33           | 4.00 | 4.05               |
| Total                   | 4.33           | 4.03 | 4.08               |
| Masculine               |                |      |                    |
| Man                     | 4.38           | 5.02 | 4.45               |
| Woman                   | 4.14           | 4.01 | 4.11               |
| Total                   | 4.28           | 4.43 | 4.29               |
| Total <sup>2</sup>      |                |      |                    |
| Man                     | 4.34           | 4.35 | 4.33               |
| Woman                   | 4.17           | 4.00 | 4.07               |
| Total                   | 4.28           | 4.09 | 4.18               |

<sup>1</sup> Gender-type of department is a continuous variable. The expected values for ‘feminine typed departments’ in this Table are obtained by imputing +/- the standard deviation of gender-typing of the department in the multilevel model (5.5). The standard deviation for gender-type of the department is 1.3345.

<sup>2</sup> Expected values for totals are based on the more parsimonious models (models 3, 4, 6 and 7 from Appendix 5.1).

Neither was this effect moderated by sex of the shop assistant ( $t = -.71, ns.$ ). The expected values even show an opposite trend; (especially male) shop assistants rate managers in role-incongruent contexts more favorably.

In summary, all hypotheses concerning the impact of sex of the manager, sex of the shop assistant and gender typing of the department were disconfirmed. The variance in shop assistants’ satisfaction with the manager can not be explained by these variables. This fact is also supported by the insignificant decrease in deviance of model 5.5 from the Conditional-Intercept model ( $\chi^2 = 5.64, p < .78$ ).

*Role (in) congruent styles*

The evaluation of male and female managers is predicted to be moderated by the leadership style addressed by the manager. To test these hypotheses, a multilevel model was estimated with at the shop assistant level (Level-1) the predictors leadership style, sex of the shop assistant, and the interaction between these two predictors:

$$\begin{aligned} (\text{SATISFACTION})_{ijk} = & \beta_{0jk} + \beta_{1jk} (\text{STYLE})_{ijk} + \beta_{2jk} (\text{SA SEX})_{ijk} + \beta_{3jk} (\text{STYLE})_{ijk} * (\text{SA SEX})_{ijk} + e_{ijk} . \end{aligned} \tag{5.6}$$



At Level-2, the independent variable is manager sex. This model is given by

$$\begin{aligned}
 \beta_{0jk} &= \gamma_{00k} + \gamma_{01k} (\text{MAN SEX})_{jk} + u_{0jk} \\
 \beta_{1jk} &= \gamma_{10k} + \gamma_{11k} (\text{MAN SEX})_{jk} + u_{1jk} \\
 \beta_{2jk} &= \gamma_{20k} + \gamma_{21k} (\text{MAN SEX})_{jk} + u_{2jk} \\
 \beta_{3jk} &= \gamma_{30k} + \gamma_{31k} (\text{MAN SEX})_{jk}
 \end{aligned} \tag{5.7}$$

Note that the interaction term  $\beta_{3jk}$  is defined as a fixed effect<sup>4</sup>. The estimated, combined model can be written as:

$$\begin{aligned}
 (\text{SATISFACTION})_{ijk} = & \delta_{000} + \delta_{001}(\text{THE HAGUE}) + \delta_{002}(\text{NIJMEGEN}) + \delta_{003}(\text{TILBURG}) + \\
 & \gamma_{01k}(\text{MAN SEX})_{jk} + \gamma_{10k}(\text{STYLE})_{ijk} + \gamma_{11k}(\text{MAN SEX})_{jk} * (\text{STYLE})_{ijk} + \\
 & \gamma_{20k}(\text{SA SEX})_{ijk} + \gamma_{21k}(\text{MAN SEX})_{jk} * (\text{SA SEX})_{ijk} + \\
 & \gamma_{30k}(\text{STYLE})_{ijk} * (\text{SA SEX})_{ijk} + \gamma_{31k}(\text{MAN SEX})_{jk} * (\text{STYLE})_{ijk} * (\text{SA SEX})_{ijk} + \\
 & u_{0jk} + u_{1jk} (\text{STYLE})_{ijk} + u_{2jk} (\text{SA SEX})_{ijk} + e_{ijk}
 \end{aligned} \tag{5.8}$$

For each of the leadership styles model (5.8) predicting satisfaction was estimated. Table 5.3.A presents the results for this model for the prediction of satisfaction with the manager. The first column presents the results for people-oriented leadership, column two to four present the model for task-oriented, charismatic and empowering leadership respectively. Note that the significant differences between the stores in satisfaction with the manager from the preliminary analyses (model 5.2, Table 5.1) have disappeared in the models including stereotypical feminine styles as predictors. Thus, the fact that the stores differed in their general level in the use of stereotypical feminine styles (as was found in Chapter 4) explained part of the variance in shop assistant satisfaction<sup>5</sup>. In Table 5.3.B the expected values for satisfaction with male and female managers, as predicted by the four leadership styles are presented. High and low scores on the leadership styles were calculated on the base of the standard deviation (one standard deviation above/below the average leadership style score). In the Appendix 5.1 the

<sup>4</sup> The variance component  $u_{3jk}$  was not included in the model. The individual  $\beta$ 's that make up the interaction between leadership style and shop assistant sex both are defined random and thus their covariance is taken into account into the random part of the model ( $w_{12}$ ). Adding the random term  $u_{3jk}$  for this effect probably leads to overfitting of the model. Furthermore, the four additional parameters that need to be estimated when  $u_{3jk}$  is added to the model,  $\omega_3^2$ ,  $\omega_{03}$ ,  $\omega_{13}$  and  $\omega_{23}$ , are barely interpretable. Finally, the number of parameters in the estimated model is already high in respect to the total N of 327. Convergence of the model with four additional parameters is highly unlikely, especially since the covariance term  $w_{12}$  cannot be expected to be independent of  $\omega_{13}$  and  $\omega_{23}$ . Consider that the latter two covariance terms can also be written as  $\omega_{1 \ 1+2}$  and  $\omega_{2 \ 1+2}$ .

<sup>5</sup> Analyses for every department store separately showed that the stereotypical feminine leadership styles predicted shop assistant satisfaction significantly in all stores (Rotterdam  $T = 9.33$ ,  $p < .001$ ; The Hague  $T = 6.75$ ,  $p < .001$ ; Nijmegen  $T = 5.71$ ,  $p < .001$ ; and Tilburg  $T = 8.81$ ,  $p < .001$ )

Table 5.3. A

*Estimated Satisfaction with the Manager by Sex of Manager, Perceived Leadership Styles and Sex of Shop Assistant*

| Parameters  | Estimate (standard error) |                          |                |                          |
|---|---------------------------|--------------------------|----------------|--------------------------|
|   | People-oriented           | Task-oriented            | Charisma       | Empowerment              |
| <i>Leadership Style Measure</i>   |                           |                          |                |                          |
| <i>Fixed Parameters:</i>  |                           |                          |                |                          |
| - baseline R'DAM $\delta_{000}$   | 4.831 (.220)              | 4.353 (.293)             | 4.937 (.163)   | 4.796 (.211)             |
| - THE HAGUE, $\delta_{100}$   | .182 (.251)               | .924 (.360)**            | -.074 (.203)   | .426 (.258) <sup>#</sup> |
| - NIJMEGEN, $\delta_{200}$  | .236 (.231)               | 1.357 (.333)***          | .219 (.171)    | .428 (.236) <sup>#</sup> |
| - TILBURG, $\delta_{300}$   | -.039 (.211)              | .547 (.308)              | -.151 (.154)   | .118 (.214)              |
| <i>Department variables (Level-2):</i>  |                           |                          |                |                          |
| - sex of the manager <sup>a</sup> $\gamma_{01k}$                                    | -.137 (.334)              | -.113 (.449)             | .086 (.279)    | -.089 (.326)             |
| <i>Shop-assistant variables (Level-1):</i>  |                           |                          |                |                          |
| - leadership style <sup>b</sup> $\gamma_{10k}$                                      | .912 (.128)***            | -.106 (.204)             | .963 (.107)*** | .855 (.117)***           |
| - sex of the shop assistant <sup>a</sup> $\gamma_{20k}$                             | -.024 (.190)              | -.130 (.291)             | -.056 (.170)   | -.204 (.195)             |
| - leadership style $\times$ shop assistant sex, $\gamma_{30k}$                      | .034 (.151)               | .192 (.267)              | -.036 (.128)   | .034 (.149)              |
| <i>Cross-Level Interactions:</i>  |                           |                          |                |                          |
| - leadership style $\times$ manager sex, $\gamma_{11k}$                             | -.198 (.257)              | .728 (.415) <sup>#</sup> | -.100 (.21)    | -.145 (.238)             |
| - shop assistant sex $\times$ manager sex, $\gamma_{21k}$                           | .013 (.341)               | -.088 (.518)             | -.227 (.309)   | .010 (.349)              |
| - leadership style $\times$ manager sex $\times$ shop assistant sex, $\gamma_{31k}$ | .225 (.276)               | .691 (.455)              | .008 (.229)    | .103 (.266)              |
| <i>Variance Components:</i>   |                           |                          |                |                          |
| <i>Department variance (Level-2):</i>   |                           |                          |                |                          |
| - intercept, $\omega_0^2$   | .306 (.191)               | .371 (.312)              | .013 (.111)    | .136 (.101)              |
| - leadership style /intercept, $\omega_{01}$  | 0                         | -.033 (.115)             | 0              | 0                        |
| - leadership style, $\omega_1^2$  | 0                         | .047 (.063)              | 0              | 0                        |
| - shop assistant sex /intercept, $\omega_{02}$                                      | -.126 (.178)              | -.255 (.370)             | -.007 (.127)   | 0                        |
| - shop assistant sex, $\omega_2^2$  | .075 (.213)               | .706 (.562)              | .012 (.175)    | 0                        |
| - shop assistant sex /leadership style, $\omega_{12}$                               | 0                         | -.001 (.136)             | 0              | 0                        |
| <i>Shop assistant variance (Level-1):</i>   |                           |                          |                |                          |
| - residual, $\sigma^2$  | .973 (.087)               | 1.811 (.173)             | .991 (.087)    | 1.183 (.101)             |
| Deviance  | 957.61                    | 1185.47                  | 929.04         | 1010.46                  |

Note. \*\* $p < .01$ , \*\*\* $p < .001$ , <sup>#</sup> $p < .10$ <sup>a</sup> Sex is dummy coded, 0 for men and 1 for women, <sup>b</sup> Leadership styles were centered around their means. Scores range from -3.95 to 2.67.

deviances of this model and more parsimonious models are given.

The predicted interaction effect between manager sex and leadership style on subordinate satisfaction (Hypothesis 4A and 4B) was not supported for the models with predictor variables people-oriented leadership ( $t = -.77, ns.$ ) charismatic leadership ( $t = -.48, ns.$ ), and empowerment ( $t = -.61, ns.$ ). The interaction effect between manager sex and task-oriented leadership was marginally significant ( $t = 1.75, p < .10$ ). For female managers, the exhibition of task-oriented leadership increases leads to more satisfied shop assistants, which is opposite to the predicted effect. The satisfaction with male managers is not influenced by task-oriented leadership ( $t = .52, ns.$ ). No significant effects were found for the three-way interaction of shop assistant sex, manager sex and leadership style on subordinate satisfaction (people-oriented leadership  $t = .82, ns.$ ; task-oriented leadership  $t = 1.52, ns.$ ; charisma  $t = .03, ns.$ ; and empowerment  $t = .39, ns.$ ). Thus, Hypothesis 4C was rejected.

Perceived Gender Identity

It was predicted that perceived gender identity relates to subordinate satisfaction with the manager. More precisely, it was predicted that androgynous managers are evaluated better than masculine, feminine and undifferentiated managers (Hypothesis 7). This hypothesis is tested in a model with the predictor variables masculinity, feminin-

Table 5.3.B  
*Expected values for Satisfaction with the Manager as a function of Perceived Leadership Styles and Sex of the Manager*

| Leadership style measure <sup>1</sup> | Satisfaction |       |
|---------------------------------------|--------------|-------|
|                                       | Man          | Woman |
| People-oriented                       |              |       |
| Low                                   | 3.69         | 3.81  |
| High                                  | 5.97         | 6.08  |
| Task-oriented                         |              |       |
| Low                                   | 4.47         | 3.57  |
| High                                  | 4.24         | 4.91  |
| Charisma                              |              |       |
| Low                                   | 3.58         | 3.81  |
| High                                  | 6.29         | 6.33  |
| Empowerment                           |              |       |
| Low                                   | 3.73         | 3.82  |
| High                                  | 5.86         | 5.59  |

<sup>1</sup> The leadership styles are continuous variables. The expected values for 'high' and 'low' in this Table are obtained by imputing +/- one standard deviation in the multilevel model (5.8) (for people-oriented leadership the standard deviation is 1.251, for task-oriented leadership it is 1.082, for charisma it is 1.413, and for empowerment it is 1.247).



ity and their interaction at the shop assistant level (Level-1). This model is given by:

$$(\text{SATISFACTION})_{ijk} = \beta_{0jk} + \beta_{1jk} (\text{MASC})_{ijk} + \beta_{2jk} (\text{FEM})_{ijk} + \beta_{3jk} (\text{MASC})_{ijk} * (\text{FEM})_{ijk} + e_{ijk} \quad (5.10)$$

At Level-2 the predictor is the sex of the manager. The model is written as:

$$\begin{aligned} \beta_{0jk} &= \gamma_{00k} + \gamma_{01k} (\text{MAN SEX})_{jk} + u_{0jk} \\ \beta_{1jk} &= \gamma_{10k} + \gamma_{11k} (\text{MAN SEX})_{jk} + u_{1jk} \\ \beta_{2jk} &= \gamma_{20k} + \gamma_{21k} (\text{MAN SEX})_{jk} + u_{2jk} \\ \beta_{3jk} &= \gamma_{30k} + \gamma_{31k} (\text{MAN SEX})_{jk} \end{aligned} \quad (5.11)$$

The interaction term  $\beta_{3jk}$  is defined as a fixed effect (see footnote 4). The estimated, combined model can be written as:

$$\begin{aligned} (\text{SATISFACTION})_{ijk} &= \delta_{000} + \delta_{001}(\text{THE HAGUE}) + \delta_{002}(\text{NIJMEGEN}) + \delta_{003}(\text{TILBURG}) + \\ &\gamma_{01k}(\text{MAN SEX})_{jk} + \gamma_{10k}(\text{MASC})_{ijk} + \gamma_{11k}(\text{MAN SEX})_{jk} * (\text{MASC})_{ijk} + \\ &\gamma_{20k}(\text{FEM})_{ijk} + \gamma_{21k}(\text{MAN SEX})_{jk} * (\text{FEM})_{ijk} + \\ &\gamma_{30k}(\text{MASC})_{ijk} * (\text{FEM})_{ijk} + \gamma_{31k}(\text{MAN SEX})_{jk} * (\text{MASC})_{ijk} * (\text{FEM})_{ijk} + \\ &u_{0jk} + u_{1jk} (\text{MASC})_{ijk} + u_{2jk} (\text{FEM})_{ijk} + e_{ijk} \end{aligned} \quad (5.13)$$

Unfortunately, not all of the random components for  $u_{ijk}$  could be estimated<sup>6</sup>. Therefore, a model for masculinity and femininity was estimated separately, in order to establish whether some of the random components can be left out of consideration. As can be seen in Table 5.4.A, there was no random variance in the slope of masculinity ( $\omega_2^2 = 0$ ) and there was also no covariance between the slope and the intercept ( $\omega_{02} = 0$ ). Thus, these two random components can be left out of the estimated model (5.13). The covariance between masculinity and femininity was included in the random part of the model. The final model is presented in the third column of Table 5.4A. The expected values for the prediction of satisfaction with the manager from perceived gender identity are presented in Table 5.4.B.

From Table 5.4.A it becomes clear that both femininity and masculinity contribute to shop assistant satisfaction (femininity  $t = 5.46, p < .001$ , masculinity  $t = 3.19, p < .01$ ). However, these effects are further qualified by the significant interaction between masculinity and femininity ( $t = -4.13, p < .001$ ) and the significant masculinity x femininity x manager sex interaction ( $t = 3.48, p < .001$ ). Attributed femininity and attributed masculinity both relate positively to satisfaction. This holds true for both male and

<sup>6</sup> This is probably due to the fact that the predictor variables masculinity and femininity are correlated ( $r = .50, p < .001$ ).

Table 5.4.A.  
*Estimated Satisfaction with the Manager by Perceived Gender Identity and Manager Sex*

| Parameters<br>Gender Identity Measure                    | Estimate (standard error) |                          |                          |
|--|---------------------------|--------------------------|--------------------------|
|  | Femininity                | Masculinity              | Femininity × Masculinity |
| <i>Fixed Parameters:</i>                                 |                           |                          |                          |
| - baseline R'DAM $\delta_{000}$                          | 4.724 (.192 )             | 4.367 (.246)             | 4.856 (.190)             |
| - THE HAGUE, $\delta_{100}$                              | .421 (.243) <sup>#</sup>  | .830 (.333)*             | .376 (.240)              |
| - NIJMEGEN, $\delta_{200}$                               | .674 (.195)***            | 1.008 (.314 )**          | .608 (.201)**            |
| - TILBURG, $\delta_{300}$                                | .153 (.197)               | .480 (.293) <sup>#</sup> | .111 (.199)              |
| Department variables (Level-2):                          |                           |                          |                          |
| - sex of the manager <sup>a</sup> , $\gamma_{01k}$       | .317 (.194) <sup>#</sup>  | .149 (.221)              | -.377 (.190)*            |
| Shop-assistant variables (Level-1):                      |                           |                          |                          |
| - femininity <sup>b</sup> , $\gamma_{10k}$               | 1.542 (.242)***           |                          | 1.409 (.258) ***         |
| - masculinity <sup>c</sup> , $\gamma_{20k}$              |                           | 1.379 (.261)***          | .788 (.247) **           |
| - femininity × masculinity, $\gamma_{30k}$               |                           |                          | -1.383 (.335)***         |
| Cross-Level Interactions:                                |                           |                          |                          |
| - femininity × manager sex, $\gamma_{11k}$               | -.034 (.323)              |                          | -.306 (.349)             |
| - masculinity × manager sex, $\gamma_{21k}$              |                           | .086 (.312)              | -.003 (.311)             |
| - masculinity × femininity × manager sex, $\gamma_{31k}$ |                           |                          | 1.303 (.374)***          |
| <i>Variance Components:</i>                              |                           |                          |                          |
| Department variance (Level-2):                           |                           |                          |                          |
| - intercept, $\omega_0^2$                                | .244 (.095)               | .384 (.133)              | .237 (.089)              |
| - femininity/intercept, $\omega_{01}$                    | -.430 (.129)              |                          | -.382 (.116)             |
| - femininity, $\omega_1^2$                               | .485 (.238)               |                          | .550 (.245)              |
| - masculinity/intercept, $\omega_{02}$                   |                           | 0                        |                          |
| - masculinity, $\omega_2^2$                              |                           | 0                        |                          |
| - femininity/masculinity, $\omega_{12}$                  |                           |                          | -.096 (.089)             |
| Shop assistant variance (Level-1):                       |                           |                          |                          |
| - residual, $\sigma^2$                                   | 1.288 (.115)              | 1.493 (.130)             | 1.111 (.010)             |
| Deviance   | 1049.06                   | 1108.24                  | 1007.06                  |

Note. \*  $p < .05$ , \*\*  $p < .01$ , \*\*\*  $p < .001$ , <sup>#</sup>  $p < .10$   
<sup>a</sup> Sex is dummy coded, 0 for men and 1 for women, <sup>b</sup> Femininity was centered and ranges from -2.077 to 1.522,  
<sup>c</sup> Masculinity was centered and ranges from -2.109 to 1.292.

female managers. However, as can be seen in Table 5.4.B, of the female managers androgynous managers are evaluated most favorably, whereas of the male managers feminine managers are evaluated most favorably. For both male and female managers, undifferentiated managers were rated lowest. Thus partial support was found for the hypothesis that shop assistants of androgynous managers are most satisfied (Hypothesis 5A).

5.3.2 Effectiveness

*Preliminary analysis*

To establish whether the department stores Rotterdam, Nijmegen, The Hague and Tilburg differed in their overall performance, for each of the effectiveness criteria (customer satisfaction, turnover and sick-leave) an ordinary least squares regression analysis was performed. The stores differed only in their turnover performance ( $R = .36$ ,  $F(3,69) = 3.17$ ,  $p < .03$ ). The Nijmegen store performed significantly worse than the other

Table 5.4.B

*Expected values for Satisfaction with the Manager as a function of Perceived Gender Identity and Sex of the Manager*

|                              |      | Satisfaction |      |        |      |
|------------------------------|------|--------------|------|--------|------|
|                              |      | Manager sex  |      |        |      |
|                              |      | Male         |      | Female |      |
| Gender identity <sup>1</sup> |      | Femininity   |      |        |      |
|                              |      | low          | high | low    | high |
| Masculinity                  |      |              |      |        |      |
|                              | low  | 2.98         | 5.91 | 3.38   | 4.76 |
|                              | high | 5.07         | 5.46 | 4.27   | 5.50 |

<sup>1</sup> Masculinity and femininity are continuous variables. The expected values for 'high' and 'low' in this table are obtained by imputing +/- one standard deviation of masculinity and femininity in the multilevel model (5.13) (for femininity the standard deviation is .593, for masculinity it is .518).

stores ( $\beta = -.41$ ,  $T(1,69) = -2.81$ ,  $p < .007$ ). The stores did not differ in their customer satisfaction ( $R = .22$ ,  $F(3,69) = 1.29$ ,  $p < .29$ ), nor in the sick-leave costs ( $R = .27$ ,  $F(3,69) = 1.71$ ,  $p < .17$ ). Therefore, in the further analyses dummy variables for the stores will be included for the turnover performance models only.

#### *Manager Sex and Gender-Typing of Departments*

Hypothesis 1.B and Hypothesis 3 were tested simultaneously in three regression analyses with manager sex, gender-typing of the department and their interaction as predictor variables, and customer satisfaction, turnover and sick-leave costs as criteria. The multiple regression coefficient for each model, and the regression coefficients for the predictor variables are presented in Table 5.5. Manager sex, gender-typing of the context and their interaction did not relate to any of the three measures of performance. Thus, support was found neither for hypothesis 1.B nor for hypothesis 3.

#### *Role-Congruent Leadership Styles*

The gender-role congruency hypothesis for the effect of leadership styles on the three measures of manager effectiveness was tested for each of the four leadership styles separately. The results are presented in Table 5.6.

None of the models for turnover were significant. The marginal effect for the model predicting turnover from manager sex, task-oriented leadership can be attributed to the above mentioned finding that in the Nijmegen store the overall turnover was worse than in the other stores ( $t(1, 69) = 2.57$ ,  $p < .02$ ). Furthermore, all of the standard estimates of the B's for the predictor variables in the turnover models were con-



Table 5.5  
Summary of Regression Analysis for the prediction of Effectiveness by Manager Sex, Sex-Composition of Shop-Assistant-team and Gender-typing of Department

|  | Effectiveness: Departmental Outcomes |               |         |                                     |               |         |                                      |               |         |
|--|--------------------------------------|---------------|---------|-------------------------------------|---------------|---------|--------------------------------------|---------------|---------|
|  | Customer satisfaction <sup>1</sup>   |               |         | Turnover <sup>2</sup>               |               |         | Sick-leave costs <sup>3</sup>        |               |         |
|  | <i>B</i>                             | <i>SE (B)</i> | $\beta$ | <i>B</i>                            | <i>SE (B)</i> | $\beta$ | <i>B</i>                             | <i>SE (B)</i> | $\beta$ |
| Constant                               | 85.04                                | 1.81          |         | 106.23                              | 3.78          |         | 5.01                                 | .58           |         |
| Manager sex <sup>a</sup>               | 2.90                                 | 2.45          | .20     | 2.33                                | 3.13          | .09     | .87                                  | .87           | .13     |
| Gender-type of department <sup>b</sup> | -.07                                 | 1.52          | -.01    | 1.77                                | 1.87          | .18     | -.46                                 | .48           | -.18    |
| Sex x gender-type department           | 1.07                                 | 1.91          | .14     | -1.99                               | 2.60          | -.14    | .34                                  | .67           | .09     |
|  | $R^2 = .04, F(3,51) = .69, p < .56$  |               |         | $R^2 = .03, F(6,69) = .43, p < .73$ |               |         | $R^2 = .05, F(3,69) = 1.07, p < .37$ |               |         |

Note. \*  $p < .05$ ; #  $p < .10$ .  
<sup>1</sup> Customer satisfaction maximum is 100 (range 52.89 - 98.29). <sup>2</sup> Percentage turnover of budgeted turnover (index 100, range 73.30 - 130.00). <sup>3</sup> Percentage of sick-leave costs (range 0 - 17.90).  
<sup>a</sup> Sex is dummy coded, 0 for men and 1 for women. <sup>b</sup> Gender-type of department is centered and ranges from -1.82 (feminine) to 1.88 (masculine).

siderably larger than the B's, i.e. the regression coefficients were far from significant. Therefore, in the following, the turnover models will not be discussed further.

*People-oriented leadership.* The regression models predicting customer satisfaction and sick-leave from people-oriented leadership and manager sex were not significant at the .05 level. However, a few regression coefficients showed a significant prediction of these effectiveness measures. People-oriented leadership predicted a department's customer satisfaction score ( $t(1,51) = 2.04, p < .05$ ). In departments where the manager was rated more people-oriented, customer service quality was higher. No evidence was found for the gender-role congruency effect of people-oriented leadership on customer satisfaction.

In departments where the manager was female, the costs for sick-leave were higher than in departments led by a male manager ( $t(1,69) = 2.06, p < .05$ ). There was a tendency that the effect for sex of the manager on the costs for sick-leave is qualified by the interaction between manager sex and people-oriented leadership ( $t(1,69) = -1.81, p < .08$ ). If the female managers use a more people-oriented leadership style, their effectiveness improves, resulting in fewer sick-leaves of their subordinates. This was not the case for the male managers ( $t(1,69) = .39, p < .70$ ). Thus, the gender-role congruency hypothesis (Hypothesis 4A) was confirmed only for female managers, which confirmed the asymmetry-hypothesis (Hypothesis 4B) that women are held to a stricter standard for gender-role congruency than men.

*Task-oriented Leadership and Charismatic Leadership.* There was no evidence for a gender-role congruency effect for task-oriented leadership and charismatic leadership, neither did the use of task-oriented leadership or charismatic leadership relate to any of the effectiveness measures.

*Empowerment.* The multiple regression coefficient for the model predicting customer satisfaction from empowerment and manager sex was marginally significant. Empowerment had a positive effect on the customer satisfaction score ( $t(1,51) = 2.30, p < .03$ ), but this effect was not qualified by manager sex, as was predicted. The gender-role congruency hypothesis, that female managers are more effective to the extent that they are more empowering, was disconfirmed for this performance measure.

The model that predicted sick-leave costs from empowerment and manager sex almost reached significance. Sick-leave was higher in departments with female managers ( $t(1,69) = 2.13, p < .04$ ), which tended to be qualified by an empowering style ( $t(1,69) = -1.90, p < .06$ ). Thus, as was the case with people-oriented leadership, when female managers use a more empowering style, sick-leave costs tend to be lower (Hypothesis 4A). For male managers, however, the leadership style did not have a significant impact on the sick-leave of their subordinates ( $t(1,69) = .14, p < .89$ ). Thus, hypothesis 4B was confirmed for the criterion variable sick-leave costs.

Table 5.6

Summary of Regression Analysis for the prediction of Effectiveness by Manager Sex and Perceived Leadership Styles

| Effectiveness: Departmental Outcomes    |                                       |              |         |                                       |              |         |                                       |              |                    |
|---|---------------------------------------|--------------|---------|---------------------------------------|--------------|---------|---------------------------------------|--------------|--------------------|
|   | Customer satisfaction <sup>1</sup>    |              |         | Turnover <sup>2</sup>                 |              |         | Sick-leave costs <sup>3</sup>         |              |                    |
|   | <i>B</i>                              | <i>SE(B)</i> | $\beta$ | <i>B</i>                              | <i>SE(B)</i> | $\beta$ | <i>B</i>                              | <i>SE(B)</i> | $\beta$            |
| Constant                                | 70.67                                 | 7.13         |         | 111.64                                | 10.46        |         | 3.74                                  |              |                    |
| Manager sex <sup>a</sup>                | 13.65                                 | 10.52        | .94     | -6.18                                 | 15.14        | -.24    | 7.91                                  | 3.84         | 1.20*              |
| People-oriented leadership <sup>b</sup> | 3.09                                  | 1.51         | .38*    | -.97                                  | 2.34         | -.07    | .22                                   | .55          | .06                |
| Sex x people-oriented leadership        | -2.44                                 | 2.23         | -.81    | 1.64                                  | 3.21         | .31     | -1.47                                 | .81          | -1.06 <sup>#</sup> |
|   | $R^2 = .11, F (3,51) = 1.92, p < .14$ |              |         | $R^2 = .13, F (6,69) = 1.61, p < .16$ |              |         | $R^2 = .10, F (3,69) = 2.32, p < .09$ |              |                    |
| Constant                                | 78.57                                 | 9.43         |         | 106.21                                | 13.30        |         | 2.52                                  | 3.50         |                    |
| Manager sex <sup>a</sup>                | 8.52                                  | 11.86        | .59     | -13.03                                | 17.18        | -.51    | 2.59                                  | 4.57         | .39                |
| Task-oriented leadership <sup>c</sup>   | 1.71                                  | 2.48         | .18     | .25                                   | 3.40         | .02     | .58                                   | .90          | .13                |
| Sex x task-oriented leadership          | -1.64                                 | 2.99         | -.49    | 3.42                                  | 4.26         | .59     | -.38                                  | 1.13         | -.25               |
|   | $R^2 = .04, F (3,51) = .60, p < .62$  |              |         | $R^2 = .16, F (6,69) = 1.95, p < .09$ |              |         | $R^2 = .04, F (3,69) = .91, p < .44$  |              |                    |
| Constant                                | 77.93                                 | 6.82         |         | 111.41                                | 9.83         |         | 4.41                                  | 2.57         |                    |
| Manager sex <sup>a</sup>                | 8.49                                  | 9.51         | .59     | -6.00                                 | 14.32        | -.24    | 2.47                                  | 3.72         | .38                |
| Charismatic leadership <sup>d</sup>     | 1.50                                  | 1.43         | .21     | -.94                                  | 2.24         | -.08    | .07                                   | .53          | .02                |
| Sex x charismatic leadership            | -1.30                                 | 2.02         | -.43    | 1.59                                  | 3.02         | .30     | -.28                                  | .78          | -.20               |
|   | $R^2 = .05, F (3,51) = .83, p < .49$  |              |         | $R^2 = .13, F (6,69) = 1.61, p < .16$ |              |         | $R^2 = .03, F (3,69) = .78, p < .51$  |              |                    |
| Constant                                | 67.47                                 | 7.72         |         | 110.39                                | 10.83        |         | 4.39                                  | 2.74         |                    |
| Manager sex <sup>a</sup>                | 13.66                                 | 13.30        | .94     | -1.14                                 | 17.98        | -.05    | 9.75                                  | 4.57         | 1.48*              |
| Empowerment <sup>e</sup>                | 3.44                                  | 1.49         | .39*    | -.63                                  | 2.21         | -.05    | .07                                   | .53          | .02                |
| Sex x empowerment                       | -2.25                                 | 2.54         | -.82    | .50                                   | 3.47         | .10     | -1.67                                 | .88          | -1.33 <sup>#</sup> |
|   | $R^2 = .13, F (3,51) = 2.37, p < .09$ |              |         | $R^2 = .13, F (6,69) = 1.57, p < .17$ |              |         | $R^2 = .10, F (3,69) = 2.52, p < .07$ |              |                    |

Note. \*  $p < .05$ ; <sup>#</sup>  $p < .10$ .<sup>1</sup> Customer satisfaction maximum is 100 (range 52.89 - 98.29). <sup>2</sup> Percentage turnover of budgeted turnover (range 73.30 - 130.00). <sup>3</sup> Percentage of sick-leave costs (range 0 - 17.90).<sup>a</sup> Sex is dummy coded, 0 for men and 1 for women. <sup>b</sup> People-oriented leadership range 2.38 - 6.44. <sup>c</sup> Task-oriented leadership range 2.40 - 6.14. <sup>d</sup> Charismatic leadership range 1.71 - 6.39. <sup>e</sup> Empowerment range 2.27 - 6.86.



Table 5.7  
Summary of Regression Analysis for the prediction of Effectiveness by Masculinity, Femininity and Manager Sex

|                                | Effectiveness: Departmental Outcomes |             |                    |                                       |             |         |                                       |             |          |
|--------------------------------|--------------------------------------|-------------|--------------------|---------------------------------------|-------------|---------|---------------------------------------|-------------|----------|
|                                | Customer satisfaction <sup>1</sup>   |             |                    | Turnover <sup>2</sup>                 |             |         | Sick-leave costs <sup>3</sup>         |             |          |
|                                | <i>B</i>                             | <i>SE B</i> | $\beta$            | <i>B</i>                              | <i>SE B</i> | $\beta$ | <i>B</i>                              | <i>SE B</i> | $\beta$  |
| Constant                       | 51.48                                | 65.59       |                    | 263.45                                | 101.40      |         | -75.52                                |             |          |
| Sex <sup>a</sup>               | -6.95                                | 17.88       | -.48               | -185.16                               | 125.05      | -.729   | 71.79                                 | 29.64       | 10.90*   |
| Masculinity <sup>b</sup>       | -4.63                                | 18.74       | -.24               | -46.41                                | 30.35       | -1.44   | 22.11                                 | 7.19        | 2.64**   |
| Femininity <sup>c</sup>        | 22.81                                | 20.40       | 1.22               | -49.05                                | 31.18       | -1.58   | 24.00                                 | 7.34        | 2.98**   |
| Masculinity x Femininity       | -2.10                                | 5.57        | -.70               | 14.53                                 | 8.99        | 2.70    | - 6.81                                | -4.89       | - 4.89** |
| Masculinity x Sex              | 8.07                                 | 7.04        | 1.87               | -2.65                                 | 9.88        | -.34    | .57                                   | 2.32        | .28      |
| Femininity x Sex               | -                                    | -           | -                  | 114.06                                | 73.91       | 14.45   | - 40.44                               | 17.48       | - 19.77* |
| Masculinity x Femininity x Sex | -1.83                                | 1.02        | -1.39 <sup>#</sup> | -16.31                                | 11.38       | -6.98   | 5.47                                  | 2.69        | 9.03*    |
|                                | $R^2 = .24, F(6,51) = 2.34, p < .05$ |             |                    | $R^2 = .20, F(10,69) = 1.46, p < .18$ |             |         | $R^2 = .27, F(7,69) = 3.19, p < .006$ |             |          |

Note. \*  $p < .05$ ; \*\*  $p < .01$ ; <sup>#</sup>  $p < .10$ .

<sup>1</sup> Customer satisfaction score maximum is 100 (range 52.89 - 98.29). <sup>2</sup> Percentage turnover of budgeted turnover (range 73.30 - 130.00). <sup>3</sup> Percentage of sick-leave costs (0 - 17.90).

<sup>a</sup> Sex is dummy coded, 0 for men and 1 for women. <sup>b</sup> Masculinity range 2.20 - 4.33. <sup>c</sup> Femininity range 1.93 - 4.22.

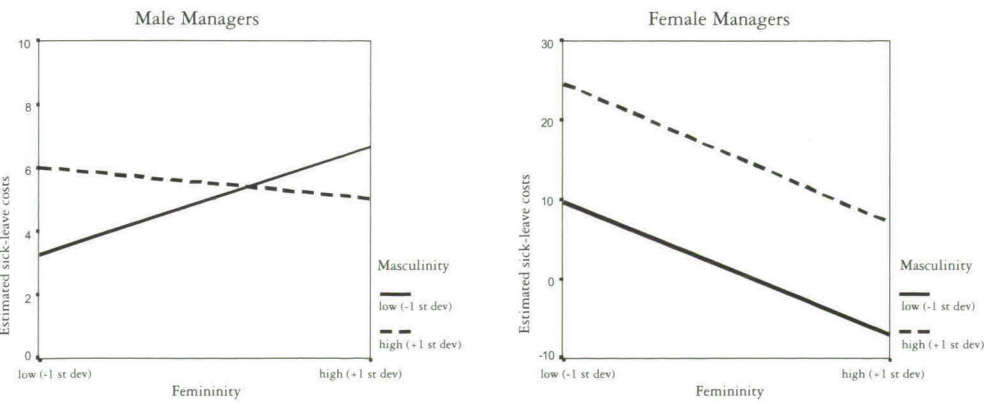
Perceived Gender Identity

Whether perceived gender identity of male and female managers relates to performance measures is tested in regression models for each of the three performance measures with the predictor variables manager sex, perceived masculinity, perceived femininity and all two and three-way interactions. The models are presented in Table 5.7. The model for turnover was not significant. The model for customer satisfaction was significant<sup>7</sup> but did not show any significant regression coefficients.

The model for the prediction of sick-leave costs was significant. The regression coefficient for manager sex was significant, female managers had higher sick-leave costs ( $t(1,69) = 2.42, p < .01$ ). Furthermore, both masculinity and femininity contributed to sick-leave costs (respectively  $t(1,69) = 3.08, p < .01, t = 3.27, p < .01$ ). These effects were further qualified by the interaction between masculinity and femininity ( $t(1,69) = -3.22, p < .01$ ), femininity and manager sex ( $t(1,69) = -2.13, p < .05$ ) and the three-way-interaction of masculinity x femininity x manager sex ( $t(1,69) = 2.03, p < .05$ ). To be able to interpret this interaction, values one standard deviation above and one standard deviation below the mean of masculinity and femininity are imputed in the regression model. Figure 5.1 shows this interaction. Attributed femininity for female managers leads to less sick-leave in their team. Masculinity leads to more sick-leave of the subordinates of female managers. As a consequence, the sick-leave costs are lowest for female managers who are ascribed mainly feminine characteristics. Especially masculine female managers who do not have feminine attributes in the eyes of their subordinates have a high percentage of sick-leave among the team members. In contrast, for male managers the sick-leave of the subordinates is highest for those managers that are attributed feminine, but are not attributed masculine characteristics. The sick-leave is lowest for male managers who are neither masculine nor feminine in the eyes of the shop assistants. In short, masculinity is detrimental for the sick-leave costs of female managers, and femininity for the sick-leave costs of male managers. Thus, hypothesis 5.B is rejected.

Figure 5.1

Estimated Sick-leave costs by Manager Sex, Perceived Femininity and Perceived Masculinity



#### 5.4 Discussion and Conclusion

In the present study the evaluation of male and female managers, leading departments in a retail organization, was examined. The criteria for the evaluation of the manager were: (1) ratings of shop assistant's satisfaction with the performance of their manager, and (2) the performance of the department the manager is leading as measured by three indices of the performance of a department, i.e. customer satisfaction, turnover and sick-leave costs, measured the effectiveness of the department lead by a manager.

It was hypothesized that female managers would be favored on satisfaction ratings (Hypothesis 1.A), whereas on effectiveness ratings male leaders would be favored (Hypothesis 1.B). No evidence was found for a differential evaluation of male and female managers on satisfaction and effectiveness measures. Although the expected values for the satisfaction of shop assistants with their manager was in the predicted direction, that is, shop assistants were more satisfied with female than with male managers, the difference was small, and not significant. Male and female managers did not significantly differ in performance outcomes either. On all three measures of departmental performance, there was no evidence for sex differences. However, considering the small data-set of the effectiveness measures (the maximum N is 70), the power of the present study may have been too small to detect possible effects. For sick-leave costs, a tendency was found in the hypothesized direction, i.e. sick-leave costs were higher on departments lead by female managers compared to departments lead by male managers. Contrary to the hypothesis that male managers fare better on performance measures, female managers tended to be more effective than male managers on the performance index turnover and customer satisfaction.

These results differ from the finding in the meta-analyses by Eagly, Karau and Makhijani (1995) and Bowen, Swim and Jacobs (2000) that female leaders fare better on satisfaction ratings and male leaders on performance ratings. Several factors may be the cause of this difference. First, differences may stem from different conceptualizations of satisfaction and performance. In this study satisfaction with the manager was measured on four items sampling shop assistant's satisfaction. The raters were asked to judge (1) their overall satisfaction with their manager, (2) how good they think their manager is in his/her job, (3) whether they would rather work for another manager, and (4) how well their manager performs compared to other managers. Thus, the present satisfaction measure includes ratings of how satisfied the respondents were with the *performance* of the manager. Consequently, the present satisfaction may sample a broader content than satisfaction per se, and as a consequence, our results may lead to a more average result that lies between more one-dimensional satisfaction and performance ratings.

Our conceptualization of performance also differs from most research that compares the performance of male and female actual managers. Most studies use performance ratings, either by subordinates, peers, superiors or judges. Not often *actual* performance of managers is compared on more objective measures such as we used. As the present study suggests, results may differ for each type of measurement instrument.



No evidence was found for the hypothesized similarity effect for sex of the rater on the evaluation of male and female managers (Hypothesis 2). The pattern of expected values even suggested a contrast effect: male shop assistants were more satisfied with female managers than with male managers. However, the satisfaction of male shop assistants was in general somewhat higher, albeit not significantly so. A similarity effect may arise only in contexts where sex of the manager is salient. In those instances where a manager is a token or out of role, and their sex is salient, shop assistants may attach more importance to this social category membership. This may result in judgments that reflect ingroup favoritism, or outgroup bias. Although it can be assumed that sex of the manager is more salient for managers leading gender-incongruent departments (see further), the interaction of sex of the shop-assistant, manager sex and gender-typing of the context on ratings of satisfaction was not significant in the present study. Of course the male and female managers in this retail organization may be out of role in their particular department, nevertheless, they do not have a token or minority position in the organization as a whole, diminishing possible similarity effects in judgments to occur.

The next question that was examined in this chapter was whether male and female managers in gender-role incongruent roles were evaluated less favorably than managers in gender-role congruent roles. Gender-role congruency was defined in two ways. It was argued that female managers may be evaluated less favorably when they (a) occupy leader positions that are more gender-incongruent (masculine-typed) and (b) lead in a more gender-role incongruent (stereotypical masculine) way. Although a gender-role congruency effect was also expected for male managers, an asymmetry in the penalties for being 'out of role' was predicted. As leadership still is a masculine prerogative, male leaders in feminine-typed contexts and male leaders using a stereotypical feminine style are still leaders and thus not that far out of role. Consequently, violations of the prescriptiveness of gender-roles are expected to be less consequential for male than for female leaders.

First it was studied whether managers leading in gender-role incongruent *contexts* are devalued compared to managers leading in gender-congruent contexts. It was predicted that male managers leading feminine-typed departments, such as the babies' clothes department, or the lingerie department, face less favorable evaluations than male managers leading masculine-typed departments, such as the outdoor department or electronic equipment department. For female managers, the opposite was predicted, i.e. more favorable evaluations were expected when leading the feminine-typed departments and less favorable evaluations when leading the masculine-typed departments (Hypothesis 3A). It was also predicted that the gender-role congruency would be more severe for female than for male managers (Hypothesis 3B).

There was no evidence that manager sex, gender-typing of the context, nor their interaction influenced the satisfaction and effectiveness of leaders. The pattern of the expected values for satisfaction of the shop assistant and for customer satisfaction was

even opposite from expected: male managers tended to fare better in the feminine-typed departments, whereas female managers tended to fare better in the masculine-typed departments. Although the regression coefficients for turnover showed a pattern in the direction of the gender-congruency hypothesis, this finding was not significant either. The pattern of expected values for the sick-leave costs suggested a tendency that to the extent that departments were more feminine-typed, sick-leave costs were higher. The latter tendency may be attributed to the 'pollution' of sick-leave costs with pregnancy leave, as the feminine-typed departments in general employ more female shop assistants. Summarized, no evidence was found for the gender-role congruency hypothesis for a manager's immediate working context (Hypothesis 3).

In general, the gender-congruency hypothesis for the organizational context is disconfirmed. The study therefore differs from the results of the meta-analysis on the evaluation of male and female organizational leaders (Eagly, Karau & Makhijani, 1995) which suggests that those leaders who are out of role suffer from less favorable evaluations. A number of reasons may account for the difference in results.

First of all, our study is confined to the gender-congruency hypothesis in the immediate working context of a manager, i.e. the micro-organizational level. At this micro-level of the organizational context the gender-typing of the context may be of less consequence. If one studies the gender-congruency hypothesis at the macro-organizational context (thus testing the hypothesis for instance in a military versus a health care system) the gender-congruency hypothesis may be confirmed. The problem with macro-organizational context comparisons, as mentioned in the introduction, is that other possible factors (such as organizational size, structure and demographics, or personal background variables of the leaders) inevitably blur the results that are found.

Second, our study only included mid-level managers. Perhaps, if the meso-level (e.g. hierarchical level, power resources) is the focus of analysis, the gender-congruency hypothesis will be confirmed. Thus, female leaders may relatively fare better at middle-management positions, whereas male leaders may fare relatively better at the highest and lowest levels, as was suggested by Eagly, Karau and Makhijani (1995).

It is also possible that gender-congruency only appears in organizations with skewed sex-ratios. Although the sex-ratios *within* the departments in the retail organization are more skewed to the extent that they were more gender-typed, the retail organization itself employs almost equal amounts of male and female managers. This may make sex of the manager less salient, even if managers lead a gender-incongruent department. It would be interesting for future research to study the impact of the immediate working context in organizations that are male-dominated or female-dominated.

Finally, it may be argued that male and female managers are equally effective in both masculine-typed and feminine-typed organizational contexts. Thus, individual differences in the evaluation of managers may exist, but sex may not be an important explanatory variable for these differences. Although we believe that this is the case for the department managers in the present study, in some organizations organizational



practices make it hard for women to perform equally well as men, because they do not have access to the same networks, opportunities and resources than men (e.g. Acker, 1991; Benschop, 1996; Ragins & Sundstom, 1989; Stroh, Brett & Reilly, 1992). The gender-role congruency effect may therefore be a contextual phenomenon itself. The present study contributes to the mapping of the conditions that diminish or enhance the gender-role congruency effect.

Whether the gender-role congruent *behavior* may result in more favorable evaluations than gender-role incongruent behavior was subsequently tested for four leadership styles: people-oriented leadership, task-oriented leadership, charismatic leadership and empowerment. Thus, it was predicted that for female managers the use of people-oriented, charismatic and empowering leadership styles will lead to more satisfied subordinates than the use of a task-oriented leadership style, whereas for male managers satisfaction with the manager is higher when they portray a more task-oriented leadership style and less people-oriented, charismatic and empowering behavior (Hypothesis 4A). Furthermore, it was hypothesized that this gender-role congruency was qualified by an asymmetry effect, i.e. especially female managers suffer from this gender-role congruency effect (Hypothesis 4B).

This study shows that leadership styles may have a remarkable effect on the satisfaction of shop assistants. The stereotypically feminine leadership styles contributed to shop assistants' satisfaction. Thus, shop assistants were more satisfied with the performance of their managers when they displayed people-oriented, charismatic and empowering leadership styles. No evidence was found for either the predicted gender-congruency effect, or an asymmetry for male and female managers. It is not likely that a lack of statistical power of the present study accounts for this finding; The expected values for the satisfaction with male and female managers are influenced in the same direction and magnitude by the stereotypically feminine leadership styles. For task-oriented leadership, a contrast effect was found. Shop assistants were more satisfied with female managers displaying task-oriented leadership, whereas shop assistants were more satisfied with male managers that were not task-oriented. As predicted, the effect for task-oriented leadership was smaller for male than for female leaders (Hypothesis 4B).

Clearly, our results contrast with the predicted gender-congruency hypothesis for the shop assistants' evaluations. One reason why the present findings contrast from previous findings on subordinate ratings may be in the research setting. In artificial and short-term laboratory settings gender-role expectations may be more likely to influence leadership evaluations than in organizational settings. Laboratory studies may not give subordinates ample opportunity to observe their leader's behavior and compare their managers with others in the organization. Particularly in this retail organization, where managers frequently switch between departments and stores, shop assistants may have had the opportunity to observe several male and female managers and conclude that sex of the manager may not be the most important feature in explaining individual differ-



ences. The 'feature' that did prove to be significant in the prediction of shop assistants satisfaction was whether the manager displayed stereotypically feminine leadership styles. Those managers were clearly evaluated better.

Sex of the manager did play a role in the evaluation of managers displaying task-oriented leadership. In contrast to the hypothesis it was found that female managers profit from the use of this style, whereas it is a disadvantage for male leaders. This gender contrast effect is more often reported in the literature (Abramson, Goldberg, Greenberg & Abramson, 1977; Luthar, 1996; Taynor & Deaux, 1973), although a congruency effect is more common (Eagly et al., 1992, 1995). Shop assistants may have overvalued the task-oriented leadership behavior by female leaders, as it forms clear evidence of leadership competence they may not have expected from a woman. It remains unclear – and a challenge for future theoretical frameworks – as to why female leaders who act out of role are sometimes discriminated against and are overvalued at other times.

So far we discussed the behavior congruency hypothesis for shop assistant ratings of their manager's performance. The picture for the effectiveness measures is somewhat different. First of all, the most 'hard' measure, turnover performance of male and female managers, was not influenced by their leadership style. Customer satisfaction, on the other hand, was influenced by the leadership style of a manager. To the extent that managers were more people-oriented and empowering, customer satisfaction ratings were more favorable. This effect was similar for male and female managers. Charismatic leadership and task-oriented leadership did not contribute to customer satisfaction. Finally, the gender-congruency hypothesis was (marginally) confirmed for two of the four styles on the effectiveness measure sick-leave costs. Again, charismatic leadership and task-oriented leadership did not relate to the effectiveness measure. Sick-leave costs were lower for female managers leading in a people-oriented and empowering fashion. For male managers the use of people-oriented or empowering leadership style did not influence their subordinates' sick-leave, as was predicted by the asymmetry hypothesis. Perhaps, shop assistants react more strongly to the lack of personal support from a female manager, compared to a male manager. However, the results for the effectiveness measures must be regarded with caution, considering the small sample size for these measures.

All in all, there is not much evidence for a gender-role congruency effect for the behavior of the manager in the present study. Only for two of the four styles, people-oriented leadership and empowerment, a congruency effect was found on only one of the four evaluation measures, sick-leave. The stereotypically masculine task-oriented leadership style even led to a contrast effect for the variable shop assistant satisfaction. Furthermore, people-oriented leadership and empowerment, and to a lesser extent charisma, contribute to a positive evaluation of a leader, for both men and women. Task-oriented leadership style on the other hand, in general did not relate to the evaluation of leaders, but female leaders did benefit from the display of this stereotypically masculine leadership styles. Perhaps because behaving in a task-oriented manner counteracts the popular beliefs that female leaders lack such styles.

The last question that was addressed in the present chapter, was whether perceived gender identity relates to shop assistant satisfaction, or to the performance of the department of a manager. Two contrasting hypotheses were stated. First, it was hypothesized that androgynous leaders would have more satisfied shop assistants (Hypothesis 5A). Second, it was hypothesized that masculinity would, and femininity would not relate to performance outcomes (Hypothesis 5B).

The first hypothesis was confirmed for female leaders. Shop assistants are more satisfied with androgynous female leaders than with feminine, masculine and especially undifferentiated female leaders. Although masculinity and femininity also contributed to the shop assistant satisfaction with male leaders, it was femininity, which was most decisive in their evaluations. This finding bears a striking resemblance with the results for the leadership styles in that female leaders who combine both stereotypically feminine and stereotypically masculine leadership styles may fare best.

The second hypothesis, that the performance of department increases to the extent that managers are perceived as masculine was rejected. Turnover and customer satisfaction could not be explained by a manager's gender identity. For sick-leave, sex of the manager qualified the relation between gender identity and performance outcomes. Masculinity was detrimental for female managers, whereas femininity was detrimental for male managers. Especially masculine female managers who do not have feminine attributes in the eyes of their subordinates have high sick-leave costs. So, in contrast to our expectations, a gender-role congruity effect was found for this measure of effectiveness. We would like to stress again, that these results should be taken with caution, considering the pollution of sick-leave with pregnancy leave.

A concluding remark needs to be made on both the power and validity of all the effectiveness measures. Although a sample of 70 departments in a field study is quite considerable, for hypothesis testing - especially with the large number of parameters in our study, the statistical power is inevitably somewhat limited. Furthermore, the performance measures may be vulnerable to factors beyond the power of a manager (e.g. an influenza epidemic, a rainy week, sales stunts of other retail organizations). On the other hand, (successfully) handling these kinds of factors is exactly what makes the department manager job a challenging one.

The practical implication of the present study is that for female leaders in the mid-level of management, the use of both stereotypically masculine and stereotypically feminine styles leads to success. The findings of this study contradict the popular view that subordinates will react negatively to female leaders who act out of role. In fact, the results on perceived gender identity also substantiate that female managers need not confine themselves to their gender-role; Androgynous female leaders have the most satisfied subordinates. Although masculine female managers do have the highest sick-leave costs, if female managers combine masculinity with femininity, the negative result for masculinity is counteracted. The latter result does suggest a double standard

for female leaders however; they need to display both masculinity and femininity to be rated as effective leaders. Considering all results of this study however, it may be argued that masculinity and stereotypical masculine leadership results in an advantage for female leaders, but not displaying masculinity or masculine leadership does not result in a disadvantage.

Finally, the present study also suggests that being a leader in an out of role context does not need to worry male and female leaders in an organization in which the sex-ratio of the manager is not skewed. The present study found that the evaluation and effectiveness of male and female managers does not depend on the immediate context they are working in. Whether this is a trend in time, departing from the general findings in earlier research that gender-role incongruent contexts lead to less favorable evaluations, or that this result may only be true for organizations that are somewhat tilted to the female side in their demographic composition, needs to be studied in further research.



## Chapter 6

### General Discussion, Conclusion and Implications

In this final chapter, the results of the review and the field study are summarized. Throughout this dissertation it is argued that the relation between gender and leadership is highly contextual. The setting in which male and female leaders and their subordinates interact, may influence their behavior and hence the consequences of their behavior. In particular, the focus was on whether the gender-typing of the context in which a leader performs affects the leadership styles of male and female leaders, as well as the evaluation by subordinates of the leader. Here, the findings of the previous chapters are gathered and theoretical notions to which these results redirect us will be explored. First, a summary is presented of the findings that were reported in the previous chapters. Second, the strength and limitations of the field study are addressed. The chapter is concluded by a discussion of the theoretical implications and a future research agenda.

### *Introduction*

In the Netherlands, women have long been, and still are, underrepresented in management, even though women's educational level and career aspirations have converged to become rather similar to those of men. Why women occupy disproportionately few leader positions in organizations, including organizations that are female-dominated (e.g. health care, social service, early childhood education) has been an ongoing topic in the social sciences. One of the explanations that have been offered is that women are, or are expected to be, different leaders than men. Research that studies differences between male and female leaders has focussed mainly on one particular type of organizational behaviors: the leadership styles of women and men. The results of studies on whether male and female leaders differ in leadership styles can be summarized rather easily: the results are contradictory. Sometimes evidence is found that women use leadership styles that have a feminine connotation (such as people-oriented leadership, democratic leadership, empowerment, and charisma) more than men, and that men use stereotypically masculine styles (such as task-oriented leadership and transactional leadership) more than women. Other research reports evidence for the opposite (counter stereotypic) effects. There is also research that reports no evidence for sex differences in leadership styles. In this dissertation, it is argued that the discrepancy in these results may be explained by the organizational context in which leaders work.

In Chapter 1 it was argued that gender roles (i.e. normative societal expectations that men are characterized by agency, self-assertion and a desire for achievement, whereas women are characterized by a sense of communion and a concern for others) influence the behavior individual male and female leaders display. Simultaneously, the organizational context sets the boundaries for leadership behavior and the perception and evaluation of this behavior. Consequently, one may expect that leadership styles of male and female leaders are moderated by the organizational context. In this dissertation, it is argued that to the extent that an organization is more feminine-typed (for instance, because the industry type concentrates on care and communion, or is female-dominant-

ed), leadership styles will emphasize nurturing and care, whereas to the extent that organizations are more masculine-typed (for instance because the industry type concentrates on competitiveness or technical skills, or is male-dominated) leadership styles will reflect agency. The fact that both the gender-typing of the organizational context and gender roles mutually influence leadership styles may be an explanation why research on the study of sex differences in leadership styles has resulted in so many discrepant findings. Hence, the first question addressed in this dissertation (Chapter 2 and Chapter 4) was:

1. *Does the gender-typing of the organizational context (differentially) influence leadership styles of male and female leaders?*

Normative societal expectations about typical attributes of women do not always match the expectations about the typical attributes of successful leaders, whereas these attributes of leaders often do match the expectations of typical attributes for men. This may lead to the expectation that women are not as suitable for management positions as men are. Given this attitudinal bias against female leaders, an interesting question is whether female leaders who occupy leader roles are devaluated compared to male leaders. It was argued that the gender-role congruency of the leader role moderates the evaluation of male and female leaders. The devaluation of male and female managers may be stronger to the extent that male and female leaders are 'out of role', either by adopting leadership styles that are associated with the opposite sex (i.e. men adopting stereotypical feminine leadership styles, women adopting stereotypical masculine styles), or by occupying a leadership position in a opposite-sex typed organizational context (i.e. men in a feminine-typed context, women in a masculine-typed context). Thus, the second and third question that were examined were (Chapter 5):

2. *To what extent is the evaluation of male and female managers influenced by the gender-role congruency of the leadership styles used by a manager?*
3. *To what extent is the evaluation of male and female managers influenced by the gender-typing of the context?*

Other researchers have emphasized that it is not sex of the manager per se, but a manager's identity in terms of masculinity and femininity that explains leadership behavior. Research has established consistently (e.g. Schein, 1973; Schein & Mueller, 1992; Schein, Mueller & Jacobson, 1989) that successful managers are characterized by masculine traits. However, today's management practices and theorizing, emphasize democratic and empowering leadership styles. This has been addressed as 'the feminization of management' (Rudman & Glick, 1999). In today's organizations, feminine characteristics may have grown in importance. Therefore, additional to the three questions stated above, the relation between a manager's perceived gender identity, leader-



ship styles and the evaluation of managers was examined in this dissertation. Masculine traits (e.g. rationality, assertiveness) were thought to relate more to different leadership styles than feminine traits (such as warmth and sensitiveness). Furthermore, it was argued that managers who combine masculine traits with feminine traits, i.e. androgynous managers, would be evaluated more favorably than managers who are characterized by either a masculine, feminine or undifferentiated gender identity. Thus, the subsequent questions addressed were (Chapter 4 and Chapter 5):

4. *Is the gender identity of male and female managers related to their leadership style(s)?*
5. *Is the gender identity of male and female managers related to the evaluation of managers?*

The first research question, on the influence of the context on leadership styles, was addressed in a meta-analytic review of the literature on gender and leadership styles between 1987 and 1999. Furthermore, all research questions were addressed in a field study in department stores. Male and female managers of departments, ranging from feminine-typed (e.g. lingerie, women's wear) to masculine-typed (e.g. electronics, hi-fi, outdoor) were rated by their shop assistants on leadership styles (task-oriented leadership, people-oriented leadership, charisma and empowerment) and gender identity (masculinity and femininity). Evaluation measures were obtained by measuring the shop assistants' satisfaction with the manager and the performance of the department (customer satisfaction, turnover, sick-leave).

In the following part of this chapter, the results of the meta-analysis and the results of the field study are summarized. In the subsequent section, the strength and limitations of the study are addressed. In the last part of this chapter, the theoretical implications of the study and future research directions that follow from this work are discussed.

### *Results of the Meta-analysis*

In the meta-analysis reported in Chapter 2 it was found that overall, sex differences are in the predicted stereotypical direction, but they are small (overall effect size = .09). When all leadership styles are taken together in a single analysis, it was found that leadership styles of men and women somewhat conform to stereotypical expectations, i.e. male leaders use the stereotypical masculine styles more than female leaders, whereas female leaders use the stereotypical feminine styles more than male leaders.

The leadership styles considered in the meta-analysis include task-oriented and people-oriented leadership, transformational and transactional leadership and autocratic versus democratic leadership. Female leaders displayed more transformational and more democratic leadership than male leaders, whereas male leaders displayed more transactional leadership than female leaders. No evidence for sex differences was found for people-oriented and task-oriented leadership styles.

The sex differences in leadership styles were moderated by several factors. In studies

in which students rated leaders on paper and pencil tests, counter-stereotypical results were found, whereas in all other types of studies (organizational studies, training and assessment studies, simulation experiments) results were in stereotypical direction. Organizational setting (e.g. business, education, and government) had an effect on effect sizes concerning transformational, transactional and task-oriented leadership styles. Women in business settings, in comparison with men, showed more transformational leadership, whereas in educational settings, men showed more transformational leadership than women. In business settings women also showed more task-oriented and transactional leadership than men, whereas in governmental and educational settings men showed more task-oriented and transactional leadership than women.

No overall evidence was found that the sex-ratio in the group of leaders that were studied, or in the group of subordinates of a leader, or in the group of authors of a study, has any influence on sex differences. A tendency was observed that female leaders display more transformational leadership when there are more men among a leader's echelon. Also, to the extent that there were more men among the authors of an article, female leaders displayed more transactional leadership. Finally, self- other- and observer ratings did not significantly influence the leadership styles used.

Summarizing, on the basis of the meta-analysis the answer to Research Question 1 is that leadership styles are indeed influenced by the organizational context of a leader. Chapter 2 also revealed that in many cases, the various organizational factors that moderate leadership behavior (such as hierarchical level, organizational type, sex ratios within organizations), are intertwined. As a result, the separate effects of the contextual factors on sex differences in leadership styles cannot properly be determined from these studies. Separate studies are needed to determine the impact of different organizational contexts. In the quasi-experimental field study, described in Chapter 3, 4 and 5, the impact of one particular organizational context, the gender-typing of the organizational context was assessed.

### *Results of the Field Study*

In contrast with the expectations, the field study did not provide clear-cut evidence for the effect of the gender-typing of the immediate context of a manager (Research Question 1). Although the intraclass correlation showed that individual differences between the managers were considerable, manager sex or gender-typing of the department was not found to be a significant predictor of these differences. The interaction between manager sex and gender-typing of the department was not significant either. However, the pattern of the expected values suggests that male managers of feminine-typed departments and female managers of masculine-typed departments were rated as more task-oriented, more people-oriented, more charismatic and more empowering than male managers on masculine-typed departments and female managers in feminine-typed departments. Furthermore, for task-oriented leadership, this pattern was stronger and significant when managers were rated by shop assistants with limited individuating information.



The field study also suggests that gender-role congruency of leadership styles does not moderate the way male and female managers are evaluated (Research Question 2). Shop assistants were more satisfied with managers who were perceived more people-oriented, more charismatic and more empowering, but this was equally the case for male and female managers. Thus, for the stereotypically feminine leadership styles, no evidence was found for a gender-role congruency effect on shop assistants satisfaction with their male and female managers. For female managers, rather than a gender-congruency effect, a contrast effect was found for task-oriented leadership, which is a stereotypically masculine leadership style. Shop assistants were more satisfied with female managers who were more task-oriented. For male managers the use of task-oriented leadership did not influence the satisfaction of shop assistants.

The results on the three performance indices were mixed. Turnover was not predicted by any of the leadership styles, nor by sex of the manager. People-oriented leadership and empowerment contributed to customer satisfaction for both men and women. For sick-leave a gender-congruency effect for female leaders was found: although sick-leave was higher in departments led by female leaders than in departments led by male leaders, sick-leave decreased when female managers displayed more people-oriented leadership. However, the validity of the instrument measuring sick-leave may be limited (see methodological strength and limitations), and so this latter result should be taken with caution.

The findings of the study regarding Research Question 3 show that for the shop assistant satisfaction measure, as well as for the three performance indices, no evidence was for a gender-role congruency effect of the organizational context. On the contrary, the pattern of the expected values suggests a tendency in the opposite direction for the measures shop assistant satisfaction and customer satisfaction. Male managers in the feminine-typed departments and female managers in the masculine-typed departments were rated more favorable.

A relation between gender identity and leadership styles, as considered by Research Question 4 was found. However, this relation was different for male managers than for female managers. Overall, people-oriented leadership, charisma and empowerment were related to femininity, whereas task-oriented leadership was related to masculinity. Furthermore, for the stereotypical feminine styles, an interaction effect was found between manager sex, femininity and masculinity. For male managers, people-oriented leadership was foremost predicted by a feminine gender identity (i.e. high on femininity and low on masculinity). Although femininity was also the strongest predictor of charismatic leadership and empowerment for male managers, androgynous leaders (high on both masculinity and femininity) were equally charismatic and empowering. For female managers, only those managers who were rated both masculine and feminine, i.e. androgynous managers, were rated as people-oriented and charismatic. Empowerment was related mostly to femininity for female managers, although again, androgynous female managers were rated as more empowering than feminine, masculine or undifferentiated female managers.



Finally, the answer to the fifth and last Research Question is that gender identity is related in some respects to subordinates' appreciation of the manager. The results are, however, ambiguous. Shop assistants were more satisfied with androgynous female managers compared to female managers whom they considered feminine, masculine or undifferentiated. In contrast, shop assistants were more satisfied with feminine male managers, than with masculine, androgynous or undifferentiated male managers. However, sick-leave was highest in departments of female masculine managers and male feminine managers. No effects were found on the other performance measures.

The general pattern that arises from this study is interesting. It was found that male and female managers do not differ in their leadership styles or in the gender identity as perceived by their shop assistants. Also, the individual differences between the managers' leadership styles did not relate directly to the gender-typing of the departments. But, in gender-role incongruent contexts, i.e. male managers in feminine-typed departments and female managers in masculine-typed departments, the pattern of expected values in the various models suggests that managers used all styles more frequently than in gender-role congruent contexts. Furthermore, the pattern of the expected values suggests that the male and female managers of these departments were also rated most favorable by their shop assistants. Together the pattern of these findings suggests that leadership styles may moderate the evaluation of managers, which was the case: All stereotypically feminine leadership styles contributed to shop assistant satisfaction with the manager and customer satisfaction. If female managers displayed more people-oriented and empowering leadership styles, shop assistants also showed less sick-leave. Additionally, female managers benefited from using task-oriented leadership styles. Female leaders were evaluated more favorably to the extent that they were more task-oriented, but only on the shop assistant satisfaction measure.

A manager's perceived gender identity was indeed related to perceptions of leadership styles and the evaluation of managers. Interestingly, the pattern for male and female managers differs. To the extent that female managers were rated as both masculine and feminine, i.e. androgynous, female managers displayed more people-oriented leadership and charismatic leadership. The female androgynous managers, as compared to female feminine-, masculine- or undifferentiated managers, were also the managers with the most satisfied shop assistants. This is in accordance with the claims of leadership theorists that androgynous managers are the most effective (e.g. Korabik & Ayman, 1987; Powell, 1988; Sampson, 1977; Sargent, 1981). Than again, for male leaders, femininity related to the stereotypical feminine styles and to shop assistant satisfaction more than masculinity did. The only divergent result was for sick-leave. Gender-role incongruent leaders, i.e. feminine male leaders and masculine female leaders, had the highest sick-leave percentages. The implications of these findings for future research and theory will be discussed later in this chapter.

*Methodological Strength and Limitations of the Field Study*

*Study Validity.* The methodological merits of this field study lie in the quasi-experimental design. Studying real managers in a real organization, as opposed to 'paper people' in a laboratory setting, or trainees simulating a leader role in an assessment situation, has the advantage that the ecological validity of the study is strong. What is measured in the present study is how subordinates perceive and evaluate the behavior of the managers they interact with on a daily basis. Although stereotypes that people have of male and female leaders (which is what one is likely to measure when studying 'laboratory leaders') inform us about societal expectations that people hold, these stereotypes may not adequately reflect how managers in real life behave and are perceived. In the domain of gender and leadership, the discrepancy between notions of sex differences, as for instance portrayed in the popular media on leadership, and actual differences between male and female leaders seems rather large. In general, sex differences in leadership are often overemphasized (Klenke, 1996) and overestimated (Vinkenburg, Johannesen-Schmidt & Eagly, 2001).

The adoption of a quasi-experimental design in which one factor is studied and as many variables as possible are held constant, has the advantage that one is more certain that results can be attributed to the variable of study, and not to other factors. However, despite the efforts to control for other organizational factors besides the gender-typing of the context, an unexpected effect for site of the department store was found. The managers of the four department stores in which the study took place, differed in their average use of leadership styles. Furthermore, the shop assistant satisfaction of the managers and the turnover also differed between the stores. Shop assistants were most satisfied in the store in which the managers were most people-oriented, charismatic and empowering, but the turnover was lowest in this store. Neither leadership styles, nor satisfaction with the manager were related to turnover (see also instrument validity). It is not likely that the site of the store impaired the hypotheses tested, because the site of the store did not relate to either sex of the manager or to gender-typing of the manager. The patterns that were found, such as a favorable evaluation of leaders using feminine-typed styles, were consistent over all four stores. Finally, the finding that leadership styles differed between department stores despite the fact that they are organized along a uniform concept is interesting. It underscores the importance of a contextual perspective to gender and leadership. Even a single organization as the subject of study may be too complex to consider as uniform.

In order to ensure that male and female managers we compared in the field study had equal leadership roles, the managers in the sample were 'matched' on structural variables, such as hierarchical position, power etceteras. Nevertheless, it was found that the male and female managers differed on a number of personal characteristics. The female managers in the present sample generally were younger and less experienced than their male counterparts. This is an interesting finding in itself. The finding may present a growing proportion of female management, at least in middle management,



in this organization. Whether this 'generation difference' may have had an impact on our results is uncertain. The number of managers that responded to the questionnaire was too small to be able to relate shop assistants' perceptions and evaluations to background variables of managers. It is a challenge for future research to combine rater data, ratee data and situational variables in one design.

Despite its many merits concerning internal validity, the choice to study managers in a single organization has, of course, disadvantages regarding the external validity. In the present organization, guidelines for managerial behavior were fairly clear and may have diminished individual (and sex) differences in behavior. First, candidates for the department managers positions that are hired were selected on a particular leadership style (we are looking for 'people's people' as the Human Resources Executive expressed it, personal communication). Second, managers undergo the typical organizational practices, cultural patterns and values when entering the organization and therefore become socialized into their roles. Finally, the organization's lifelong training and managerial development programs may 'streamline' the behavior of the managers in this organization. Still, individual managers do differ to a considerable extent, as the substantial intra-class correlation shows. It is, however, not sex of the manager or gender-typing of the department, which explain these individual differences.

Other factors that could not be controlled for in the present study, but which may be of importance, are the type of industry or business, the level of management, country, and sex ratios. The findings of the present study regarding the perception and evaluation of male and female managers in differently gender-typed contexts may pertain to department managers of department stores in the Netherlands and may not generalize to other types of business, or other types of industries, or other levels of management. As the sex-ratio in this organization was particularly skewed (77% of the shop assistants were women), the present study also may not generalize to other retail organizations in which the sex-ratio is different. Future research could address these issues.

*Instrument Validity.* Most of the measures used in the field study were collected by means of questionnaires. For shop assistants' satisfaction with their manager, this is exactly what is needed: each individual's subjective judgment about how well a manager is performing. The measurement of leadership styles by this method is a subject of debate. Mintzberg (1973) calculated that the supervision of subordinates makes on average only 10% of the daily activities of leaders. The observation of leadership styles may therefore be a very difficult task to accomplish. Most data on leadership styles are therefore collected by means of questionnaires, measuring self- or other perceptions of leadership styles. Some of the individual studies discussed in Chapter 2, reported differences between self-ratings and ratings by others. Konst (1998) argued that subordinates may have more accurate perceptions of their leader's behavior, because this information may help them 'to get their way' in influencing their superiors.

Possible perception biases of raters, which may be present in these questionnaire data, are interesting in their own right. Hence we examined this possibility in the per-



ception of leadership styles (Chapter 4). The ratings of those shop assistants who have limited individuating information at hand were compared with those of shop assistants that have had ample opportunity to observe their manager's behavior. An effect was found for individuating information about a manager: people with less individuating information rated their manager as being less people-oriented and empowering, but more task-oriented than shop assistants who knew their manager well. However, one may question whether this effect indeed represents perception biases because an alternative interpretation seems plausible too: Shop assistants who have had little contact with their manager may have a less personal and thus more formal relationship with their manager. Accordingly, leadership styles employed towards these shop assistants may be more task-oriented and less people-oriented, empowering and charismatic. Again, for the masculine-typed leadership styles a different process may additionally have guided this interaction, because leaders in gender-role incongruent departments (i.e. men in feminine-typed departments, women in masculine-typed departments) were rated more task-oriented when perceived by shop assistants with limited information. This suggests that managers who are out of role pursue an impression management strategy. When they interact with subordinates they are not familiar with, they may reside to the more formal and instrumental leadership behaviors. Even snap judgments by subordinates who have had little contact with their manager, may be accurate (cf. 'thin slices', Ambady, & Rosenthal, 1993; Ambady, LaPlante, & Johnson, 2001).

Summarizing, the use of questionnaires to measure the perception and evaluation of leadership is a satisfying, unobtrusive, option for studying the present research questions.

In addition to questionnaires, performance indicators of the organization were used to assess the success of male and female managers. The validity of the performance indices, customer satisfaction, turnover and sick-leave, may have been prone to factors outside the realm of the manager. Sick-leave, for instance, also incorporated pregnancy leave. As a result of this 'noise' in sick-leave, pregnancy is logically confounded with the gender-typing of departments, as feminine-typed departments have relatively more female shop assistants. For the most 'hard' measure of a manager's performance, i.e. turnover, the only significant finding was that the Nijmegen store performed worse than all other stores. As the data were not gathered in the same month in each of the four stores, it is not clear what factors (a rainy week, an influenza epidemic, discontent among the personnel in the store, to mention just a few possibilities) may account for this finding. On the other hand, managing these external factors to one's benefit is perhaps what makes a manager outstanding. Finally, it is striking that customer ratings of contentment with the delivered service often showed patterns similar to the shop assistant satisfaction with the performance of the manager. It may well be the case that a manager's ability to empathize with others, which underlies the more stereotypically feminine styles, extends to customers as well. Customer satisfaction may therefore be a valid instrument for measuring the performance of a manager.

*Statistical Issues.* One of the major assets of this study is the adoption of Multilevel

Random Coefficient Models (MRCM). The shop assistants are nested within departments, and departments are nested within department stores. The nesting of individuals in groups causes dependency of the observations, which violates the assumptions of traditional data analysis techniques. In the present study, dependency of observations was substantial, because shop assistants not only 'share' the context in which they are working, but also share the manager who they are evaluating. MRCM are able to treat these nested data, and handle each measured variable at the appropriate level of analysis, i.e. shop assistant variables are considered at the individual level of analysis and department variables at the department level. The most important statistical improvements, compared to traditional approaches such as AN(C)OVA or regression analysis, are that standard deviations are properly estimated and variables may be treated as having random effects. Moreover, MRCM's theoretical improvement is the possibility of studying interaction effects between different levels of analysis, e.g. between group level factors and individual factors. MRCM lends itself perfectly for studying organizational behavior or group research.

The high number of parameters that were estimated for testing the interaction hypotheses, in combination with the modest sample size (40 male and 30 female managers rated by 327 respondents), may have hampered us in testing the hypotheses. However, the fact that no support was found for a number of the hypotheses tested, cannot entirely be attributed to a limitation of statistical power. Inspection of the expected values learned that the pattern of findings was rather consistent, but in the opposite direction than hypothesized. Therefore, we are fairly confident that increased statistical power would also have also led to rejection of tested hypotheses.

An issue of a more epistemological nature concerns the emphasis in (psychological) hypothesis testing on finding differences. The evidence of sex differences in the domain of leadership seems to point towards similarity rather than difference. However, the state of affairs in statistical hypothesis testing falls short of the possibility of testing the hypothesis that the sexes are similar. An alternative route is not to polarize towards Yes or No directions when studying possible sex differences, but define differences in their magnitude, i.e. express findings in effect sizes. Moreover, meta-analysis may be a powerful tool to view sex differences in context. Contradictory findings can often be explained by considering the context in which the research took place. However, in meta-analysis, such as our own (Chapter 2), (overall) effect sizes are again tested for the significance defined as 'different from null', based on 95% confidence intervals. Other researchers have made attempts to develop tests for similarities. Ofori-Dankwa and Tierman (2000) for instance, propose an overlap index, which measures the percentage of the area that is shared by the (normal) distribution of two groups on some measure. This has the additional advantage that different standard deviations of groups can also be taken into account. Concluding, current statistical procedures of hypothesis testing in much research - including our own, have the inherent disadvantage of looking for differences rather than similarities. We would applaud future research to also report on overlap between groups compared.



*Theoretical Implications and Future Research*

The present field study found that leadership styles affect the satisfaction of shop assistants and customers. Especially stereotypical feminine styles contribute to a favorable evaluation of managers. The picture that emerges from the results of this study may suggest that there is a 'feminization of management' at hand, at least in department stores in the Netherlands. 'Feminization', because as the study indicates, male leaders with a feminine gender identity and male leaders who behave in stereotypical feminine ways, are more successful than their more masculine counterparts. For decades, researchers have found that to be perceived as a successful manager, one needs to 'breathe' masculinity (Schein, 1973; Schein & Mueller, 1992; Schein, Mueller & Jacobson, 1989). More recently, the image of the successful manager as masculine may have changed somewhat. Research by Brenner, Tomkiewicz and Schein (1989) and by Rojahn and Willemsen (1994), for instance, found that female raters attribute both masculine and feminine characteristics to successful managers. Furthermore, in recent management theorizing, feminine characteristics are expected to be more important in present day organizations. Management practices like 'shopfloor management' (Suzaki, 1993) and 'self-managing workteams' (Manz & Sims, 1987) have spread rapidly in organizations, emphasizing leadership built on empowerment, cooperation, intuition and empathy. The present study suggests that in the organization it describes, feminine characteristics are highly valued. However, a feminization of management in this organization holds true for male rather than for female leaders. Femininity, which predicted stereotypical feminine styles for men, led to success for male leaders. For female leaders, androgyny, and a combination of stereotypical feminine and stereotypical masculine styles, led to success.

The latter finding, that stereotypical masculine styles are effective for female managers, contradicts expectations raised by the review in Chapter 1 that gender-role congruent behaviors lead to more favorable evaluations. In the present study, shop assistants may have overvalued the task-oriented leadership behavior by female leaders (and the people-oriented, charismatic and empowering leadership by male leaders), as it is clear evidence of leadership competence they may not have expected of a woman (or a man). Future research should address the conditions that lead to congruency effects or contrast effects in evaluations of managers.

It is interesting to note that both male and female managers in gender-role incongruent contexts displayed more task-oriented leadership styles towards shop assistants they did not know well. It may be argued that stereotypically masculine styles like task-oriented leadership, serve a different purpose and are guided by different type of processes than the stereotypically feminine styles (cf. Fiedler's (1967) Contingency Model, Hersey and Blanchard's (1974) Situational Leadership Theory). When leaders are in an out of role context, task-oriented leadership may have the purpose of communicating the formal, superior position of the manager. It may therefore be an impression management strategy. Future research should consider the question whether masculine- and femi-



nine-typed styles do not only differ in their gender-typing, but perhaps in their underlying functional processes as well.

A perhaps even more significant finding is the fact that gender identity both relates to leadership styles and to the evaluation of managers, for it suggests new ways to study gender and leadership. It is puzzling that male managers benefit the most from a feminine gender identity, whereas female managers benefit the most from an androgynous identity. Furthermore, the fact that perceived identity relates more strongly to both leadership styles and to the evaluation of managers fuels the conclusion that sex as an explanatory factor is less important than other individual characteristics of a manager. The fact that identity is such an important explanatory variable of individual differences in leadership styles and of the evaluation of leaders advocates researchers to focus more on organizational members' social identities. It may be the case that other demographic characteristics of organizational members (for instance type of education, ethnicity, demographic constitution of a department) may be as important, or more important, in what organizational members feel are relevant identities for a certain leadership position. Recent theorizing and research from the perspective of social identity theory (Tajfel & Turner, 1979) and social categorization theory (Turner, 1985) suggests that individuals whose social identity are 'prototypical' of their organizational members, may be the ones who are perceived as most suited for management positions (Fielding & Hogg, 1997; Hogg & Terry, 2000). Social identity theory may be a promising route to study the relation between normative expectancies of leaders in different organizational contexts.

A remarkable finding is the fact that sex of the manager in itself (as a main effect) does not significantly predict any of the leadership styles, their perceived gender identity or the evaluation of managers. These findings of no direct impact of sex of a manager, suggests that in some contexts men and women who lead in the same organization, and have similar management positions, are similar in many respects. Furthermore, it also suggests that sex differences which are found in the laboratory may not extend to (all) organizational settings (cf. Eagly & Johnson's, 1990). The argument that female leaders are not as suitable for management as male leaders, an explanation often given to defend the glass ceiling, may thus be based more on bias than facts.

It would be erroneous to conclude from the null findings that sex of a manager does not make a difference in the department stores. Managers bring more to an organization than their leadership style. For instance, women may have other attitudes towards certain organizational practices than men. In the retail organization under study for instance, the conditions of employment have changed the past two to four years as a result of pressure from young mothers among the department managers, catalyzed by the tight labor market (personal communication department manager and Human Resource executive). The organization offers more childcare facilities for female *and* male employees and part-time jobs may not impair a career to the extent that was the case ten years ago.

As the present research was limited to a single organization and a single manage-

rial level, our findings may not apply to other organizational contexts. The sex-composition of the manager echelon in this organization for instance, was almost balanced (30 women, 40 men), which may make sex of the manager not a very salient characteristic in *this* organization. The situation in organizations with more skewed sex-ratios may be completely different. In organizations that are male- or female- dominated at the management level, gender roles may become more influential in the perception and evaluation of managers of the scarcer sex. Future research that would adopt the same systematic design in organizations with an unbalanced sex-ratio may, or may not find other results than this study did. Also, The Netherlands is likely to be too small a country to apply our present design to male-dominated organizations, since it is probable that the number of female managers will approach nil (see Chapter 3).

The particular management level that was studied may be less prone to the influence of gender roles than the highest management levels. Baumgardner, Lord and Maher (1993) have proposed that at each level of management, different perception processes are at hand. At mid-level management positions, they suggest that perceivers may have more experience with recognizing the traits and behaviors of effective managers. Perceivers of mid-level managers 'may access leadership categories more readily than they do gender-related categories' (p. 112). Women at executive management levels 'may still suffer from weak leadership perceptions. Observers (...) may rely on general stereotypes and limited-capacity processes. Further, gender is highly salient because women executives are relatively rare' (p.113). The study of women in high level executive positions is very difficult. First, the number of leaders in such positions is limited, especially in a relative small country as The Netherlands. Second, since they are few, they are very visible and may not like to stress this by being a subject of research. In the future, researchers could address the developmental processes that result in the horizontal and vertical sex-segregation within organizations and in the labor market in general. The field in general would benefit from research that studies processes rather than outcomes.

The present study contributes to our understanding the complexity of gender and leadership in different contexts. Research that unravels the different contextual factors that play a role in organizational behavior may help to understand the complicated field of gender and leadership more thoroughly. Of course, reality *is* intertwined. Leadership behavior of male and female managers may be a result of a multitude of influences, all interacting, as Deaux and Major (1987) explained for behavior by men and women in general. The leader enters the organization with a set of personal goals, beliefs and expectancies, which may be gendered. He or she interacts with superiors and subordinates who, in turn, all bring their own, possibly gendered beliefs, expectancies and motivations. The interaction between these organizational members takes place in a specific context that elicits (sometimes gendered) expectancies itself. It is a challenge for future theorizing to develop models that do justice to the intricacy of leadership, and organizational behavior in general. It is an even bigger challenge to go behind theorizing and test such interaction models in organizational practice.



## Samenvatting

Dit proefschrift gaat over de leiderschapsstijlen en de waardering voor, en effectiviteit van, mannelijke en vrouwelijke leidinggevendenden in verschillend gender-getypeerde organisatiecontexten. De achterliggende vraag was in hoeverre mogelijke sekseverschillen in leiderschapsgedrag en en eventueel daarmee samenhangende verschillen in de waardering van mannelijke en vrouwelijke leidinggevendenden een oorzaak zouden kunnen zijn voor het onevenredig lage aandeel vrouwelijke leidinggevendenden in organisaties.

De deelname van vrouwen aan de Nederlandse arbeidsmarkt is de afgelopen decennia toegenomen. Was de arbeidsdeelname van vrouwen in 1960 nog 25%, tegenwoordig verricht 51% van de vrouwen in Nederland betaalde arbeid. De arbeidsdeelname van mannen fluctueerde in deze zelfde periode van 90% in 1960 tot 76% in 1999 (Hooghiemstra & Niphuis-Nell, 1993; Keuzekamp & Oudhof, 2000). Het aandeel van vrouwen in managementposities is ook sterk toegenomen, van nog geen 7% in 1977, tot 21% in 1999. In vergelijking met de hele Europese Unie (30%) of met de Verenigde Staten (51%) is het percentage vrouwen onder managers in Nederland aanmerkelijk lager. Voor iedere bedrijfstak in Nederland geldt dat het aandeel van vrouwen in managementposities aanzienlijk kleiner is dan het vrouwelijk potentieel aan leidinggevendenden in deze organisaties. Met name in de top van organisaties is het aantal vrouwen erg klein. Van de top – commissarissen en bestuursleden – van de 5000 grootste bedrijven in Nederland is maar 2.8% vrouw. Ook in de zorg- en welzijnssector, waarin vrouwen 71% van het personeelsbestand uitmaken, is het aandeel vrouwen op de besluitvormende posities niet hoger dan 25%.

De diverse belemmeringen die vrouwen ondervinden om door te stromen in de (hogere) managementposities worden samen het 'glazen plafond' genoemd. Sinds 1970 is er veel wetenschappelijk onderzoek verricht naar mogelijke oorzaken van het glazen plafond. Analyses van deze belemmeringen zijn in grote lijnen in te delen in analyses op maatschappelijk-, organisatie-, interpersoonlijk- en individueel niveau (zie bijvoorbeeld Ragins & Sundstrom, 1989; Powell, 1999). Analyses op het maatschappelijke niveau richten zich op de manier waarop de samenleving gestructureerd is. De (normatieve) verwachtingen die voortkomen uit de verdeling van arbeid en macht in de samenleving verschillen voor mannen en vrouwen en kunnen leiden tot andere loopbaankeuzes en mogelijkheden voor mannen en vrouwen. Analyses op organisatieniveau richten zich op de manier waarop organisaties zijn gestructureerd. Organisatiepraktijken rondom selectie en promotie bijvoorbeeld, resulteren vaak in andersoortige carrières voor mannen en vrouwen. Analyses op het interpersoonlijk niveau richten zich op de interactiepatronen tussen leden van, en groepen binnen een organisatie, die anders kunnen zijn voor de mannen en vrouwen van een organisatie. De numerieke minderheidspositie van vrouwen in managementposities bijvoorbeeld, kan van invloed zijn op de waarneming en evaluatie van vrouwen in deze uitzonderingsposities. Analyses op het indi-



vidueel niveau tenslotte, richten zich op de achtergrond, gedragingen en ervaringen van individuele mannen en vrouwen in de organisatie.

Het onderzoek dat in dit proefschrift wordt gerapporteerd is gebaseerd op een theoretisch kader dat deze analyseniveaus doorsnijdt. Bestudeerd werd (a) in hoeverre de organisatiecontext waarin mannelijke en vrouwelijke leidinggevendenden werken van invloed is op hun leidinggevende stijl en (b) in hoeverre de organisatiecontext en de leidinggevende stijl van invloed zijn op de evaluatie van mannelijke en vrouwelijke leidinggevendenden. In hoofdstuk 1 van dit proefschrift werd uiteengezet dat normatieve maatschappelijke verwachtingen over de rollen en het gedrag van mannen en vrouwen in de samenleving het gedrag van leidinggevendenden deels beïnvloeden. Van mannen wordt verwacht dat zij meer assertief en competent, oftewel *masculien* zijn, terwijl van vrouwen wordt verwacht dat zij meer gevoelig en zorgzaam, oftewel *feminien* zijn (Broverman, Vogel, Broverman, Clarkson & Rosenkrantz, 1972; Deaux & Lewis, 1984; Willemsen & Fischer, 1999; Williams & Best, 1990). Tegelijkertijd is de organisatiecontext ook van invloed op leiderschapsgedrag van, en de waardering voor leidinggevendenden. Beargumenteerd werd dat naarmate de organisatie-context meer 'feminien' is, bijvoorbeeld doordat de organisatie zich richt op zorg en communicatie, of numeriek gedomineerd wordt door vrouwen, leiderschapsstijlen ook sterker gericht zijn op zorg en communicatie, terwijl in meer 'masculiene' organisatie-contexten, die bijvoorbeeld gericht zijn op techniek of competitie, of die numeriek gedomineerd worden door mannen, leiderschapsstijlen sterker taakgericht of onderhandelend zullen zijn. Kortom, beargumenteerd wordt dat de leiderschapsstijlen van mannelijke en vrouwelijke leidinggevendenden onderhevig zijn aan zowel normatieve verwachtingen over typische eigenschappen van mannen en vrouwen, als aan invloeden uit de organisatiecontext.

Verder werd uiteengezet dat normatieve verwachtingen over typisch gedrag en de rollen van mannen en vrouwen, invloed hebben op de manier waarop mannelijke en vrouwelijke leidinggevendenden door anderen waargenomen en gewaardeerd worden. Het doorbreken van rolverwachtingen leidt in het algemeen tot meer negatieve evaluaties (Carli & Eagly, 1999). Vrouwelijke leidinggevendenden die zich een meer masculiene stijl aanmeten, of in een meer masculiene organisatie-context werken, lopen het gevaar dat zij minder competent, aardig of gekwalificeerd beoordeeld worden (bijv. Eagly, Makhijani & Klonsky, 1992; Eagly, Karau & Makhijani, 1995; Rudman, 1998).

Ook werd in hoofdstuk 1 de relatie tussen leiderschapsstijlen en de waargenomen gender identiteit – iemands identiteit in termen van masculiniteit en femininiteit – toegelicht. Veelal blijkt uit onderzoek (zie bijvoorbeeld Korabik, 1982, Korabik & Ayman, 1987; 1994) dat verschillen in leiderschapsstijlen beter verklaard kunnen worden door de gender identiteit van een leidinggevende dan door diens sekse. Een masculiene gender identiteit is gerelateerd aan de meer masculiene leiderschapsstijlen, terwijl een feminiene gender identiteit gerelateerd is aan meer feminiene leiderschapsstijlen. Onderzoek naar de relatie tussen gender identiteit en de evaluatie en effectiviteit van managers is minder eenduidig. Hoewel uit het meeste onderzoek naar voren komt dat

leidinggevend en die masculiene en feminiene eigenschappen combineren, dat wil zeggen androgyne leidinggevend en, het meest succesvol zijn (Hackman, Hills, Paterson & Furniss, 1993; Korabik & Ayman, 1994), is er ook onderzoek waaruit blijkt dat met name masculiniteit effectief is voor leidinggevend en (Baril, Elbert, Mahar-Potter & Reavy, 1989; Maurer & Taylor, 1994).

Hoofdstuk 2 richtte zich op de vraag in hoeverre mannelijke en vrouwelijke leidinggevend en verschillen in de leiderschapsstijlen die zij gebruiken. De leiderschapsstijlen die werden onderzocht waren mensgericht leiderschap, taakgericht leiderschap, democratisch versus autocratisch leiderschap, transformationeel leiderschap en transactioneel leiderschap. Tevens werd onderzocht in hoeverre kenmerken van de context eventuele sekseverschillen nader kunnen verklaren. De kenmerken van de context die onderzocht zijn betreffen twee soorten. Ten eerste kenmerken die betrekking hebben op eigenschappen van de onderzoekscontext, bijvoorbeeld of het een laboratorium-, assessment- of organisatie-onderzoek betreft en of de leiderschapsstijl is gemeten met vragenlijsten ingevuld door leidinggevend en zelf, door derden, of dat het een observatie-onderzoek betreft. En ten tweede kenmerken van de organisatiecontext van de leidinggevend e, bijvoorbeeld het soort organisatie, het hiërarchische niveau waarop een manager werkt en de sekse samenstelling binnen een organisatie of delen daarvan. Het onderzoek is uitgevoerd met behulp van een meta-analyse van gepubliceerd onderzoek, verschenen tussen 1987 en 1999.

Wanneer alle leiderschapsstijlen tezamen worden bekeken, blijkt dat mannen en vrouwen van elkaar verschillen in de verwachte stereotiepe richting, dat wil zeggen dat mannelijke leidinggevend en de stereotiep masculiene leiderschapsstijlen vaker gebruiken dan vrouwen, terwijl vrouwen de stereotiep feminiene leiderschapsstijlen vaker gebruiken. Het verschil is echter klein (effect size  $d = .09$ ), minder dan 1% van de individuele variantie in leiderschapsstijl kan verklaard worden door sekse van de leidinggevend e. Wanneer naar de verschillende leiderschapsstijlen apart wordt gekeken, blijkt dat vrouwelijke leidinggevend en vooral meer transformationeel ( $d = -.19$ ) en meer democratisch ( $d = -.10$ ) leiderschapsgedrag vertonen dan mannelijke leidinggevend en. Voor de overige stijlen werden geen significante sekseverschillen gevonden.

Wat betreft de studiecontext is gevonden dat de resultaten van onderzoek in organisaties, assessments en laboratorium-simulaties vaker in stereotiepe richting zijn, terwijl resultaten van zogenaamd 'papier-en-potlood' onderzoek onder studenten vaker in contra-stereotiepe richting gaan. Het soort beoordelaar blijkt geen effect te hebben op de verschillen tussen mannen en vrouwen.

Het type organisatie waarin een leidinggevend en werkzaam is, blijkt van invloed op sekseverschillen in transformationeel, transactioneel en taakgericht leiderschap. In de zakenwereld vertonen vrouwelijke leidinggevend en in vergelijking met mannelijke leidinggevend en meer transformationeel leiderschap, terwijl in de onderwijssector mannelijke leidinggevend en in vergelijking met vrouwelijke leidinggevend en, meer transformationeel leiderschap vertonen. Vrouwelijke leidinggevend en in de zakenwereld ver-



tonen ook meer transactioneel en taakgericht leiderschap dan mannelijke leidinggevers, terwijl mannelijke leidinggevers bij de overheid en in het onderwijs meer transactioneel en taakgericht leiderschap vertonen dan vrouwelijke leidinggevers. Vrouwelijke leidinggevers geven ook meer transformationeel leiding dan mannen in de hogere managementposities, terwijl mannelijke leidinggevers meer transformationeel leidinggeven in de lagere managementposities. De sekse samenstelling van de groep werknemers in een organisatie is niet gerelateerd aan sekseverschillen in leiderschapstijlen. Tenslotte is een tendens gevonden dat vrouwen meer transformationeel leiderschap gebruiken naarmate zich relatief meer mannen bevinden in een managementechelon. Sekse samenstelling blijkt geen invloed te hebben op de effect groottes van de overige management stijlen.

Samenvattend kan uit deze meta-analyse geconcludeerd worden dat context van invloed lijkt te zijn op sekseverschillen in leiderschapstijlen. Naarmate leidinggevers zich in een rol bevinden waarin ze als man of vrouw 'uit de toon vallen', laten zij meer transformationeel, meer transactioneel en meer taakgericht leiderschap zien. De interpretatie van de resultaten wordt echter bemoeilijkt door het beperkte aantal studies in de meta-analyse en doordat verschillende verklarende factoren (zoals hiërarchisch niveau, soort organisatie, sekse samenstelling) met elkaar en met een leiderschapstijl vervlochten zijn. Toekomstig onderzoek zou zich dan ook moeten bezig houden met de differentiële impact van de verschillende factoren op sekseverschillen of -gelijkenissen in leiderschapstijlen.

De quasi-experimentele veldstudie die vervolgens in dit proefschrift werd beschreven draagt bij aan het ontwarren van de kluwen van variabelen die sekseverschillen in de evaluatie en perceptie van leidinggevers modereren. Onderzocht is de invloed van een specifieke contextvariabele, namelijk de gender-typering van de afdeling, terwijl voor andere factoren gecontroleerd werd. In hoofdstuk 3 zijn de opzet van de studie, de respondenten, de meetinstrumenten, en de analysemethodes beschreven. Het quasi-experimentele design kwam op een natuurlijke manier tot stand door afdelingsmanagers van verschillende gender-getypeerde afdelingen binnen één warenhuisketen te bestuderen. Ieder warenhuis herbergt circa 20 zelfstandige afdelingen, zoals bijvoorbeeld heren- en damesmode, lingerie, cosmetica, electronica, buitensport en woninginrichting. Deze afdelingen kunnen worden gerangschikt op een continuüm van zeer feminien (bijvoorbeeld damesmode) tot zeer masculien (bijvoorbeeld electronica). Om deze rangschikking te bepalen werd een vooronderzoek uitgevoerd welke tevens is gerapporteerd in hoofdstuk 3.

In Hoofdstuk 4 is onderzocht in hoeverre de gender-typering van de afdeling invloed heeft op de manier waarop verkopers hun mannelijke en vrouwelijke leidinggevers beschrijven in termen van mensgericht, taakgericht, charismatisch en verantwoordend leiderschap ('empowerment', in hoeverre managers hun werknemers autonomie en vertrouwen geven). Ook is onderzocht of de perceptie van werknemers die hun manager minder goed kennen meer sekse-stereotiep is. Tenslotte is onderzocht of



de gender identiteit van managers, zoals waargenomen door de verkopers, gerelateerd is aan leiderschapsstijlen.

In tegenstelling tot de verwachtingen is geen bewijs gevonden voor het effect van de gender-typering van de context op leiderschapsstijlen van mannelijke en vrouwelijke managers. Hoewel de managers onderling wel van elkaar verschillen, kunnen noch sekse, noch de context deze individuele verschillen verklaren. Niettemin vertonen de gegevens wel het (niet significante) patroon dat mannelijke managers op femien-getypeerde afdelingen en vrouwelijke managers op masculien-getypeerde afdelingen als meer mensgericht, meer taakgericht, meer charismatisch en meer verantwoording gevend worden ervaren dan mannelijke managers van masculiene afdelingen en vrouwelijke managers van feminiene afdelingen. Wat betreft taakgericht leiderschap, is dit patroon sterker en significant wanneer managers worden beoordeeld door werknemers die hun manager minder goed kennen.

Verder blijken de waargenomen gender identiteit van een manager, en zijn of haar leiderschapsstijl inderdaad aan elkaar gerelateerd te zijn, maar voor mannelijke en vrouwelijke managers op een verschillende manier. In het algemeen hangen feminiene kenmerken samen met mensgericht, charismatisch en verantwoording gevend leiderschap, terwijl masculiene kenmerken samenhangen met taakgericht leiderschap. Voor mannelijke managers wordt mensgericht leiderschap vooral voorspeld door een zogenoemde feminiene gender identiteit (dat wil zeggen dat zij vooral feminiene en weinig masculiene eigenschappen bezitten). Feminiteit is ook de sterkste voorspeller van charismatisch en verantwoording gevend leiderschap van mannen, maar androgyne mannelijke managers (degenen die zowel feminiene als masculiene eigenschappen bezitten) zijn even charismatisch en verantwoording gevend als feminiene mannelijke managers. Voor vrouwelijke managers geldt, dat alleen vrouwen die feminiene en masculiene eigenschappen combineren (dat wil zeggen androgyne managers), als mensgericht en charismatisch worden waargenomen. Verantwoording gevend leiderschap van vrouwelijke managers wordt vooral voorspeld door femininiteit, hoewel ook voor deze leiderschapsstijl geldt dat androgyne vrouwelijke managers als het meest verantwoording gevend werden ervaren.

Hoofdstuk 5 beschrijft het onderzoek naar de evaluatie van mannelijke en vrouwelijke managers als functie van de gender-getypeerde context en de gender-getypeerde leiderschapsstijl van managers. Verondersteld werd dat (a) managers die een management-positie bekleden op een gender-rol incongruente afdeling (bijvoorbeeld mannen op de baby- en kinderafdeling en vrouwen op de electronica) minder goed geëvalueerd zouden worden dan managers op een gender-rol congruente afdeling, en (b) managers die een gender-rol incongruente stijl hanteren (bijvoorbeeld vrouwen die een taakgerichte stijl hanteren en mannen die een mensgerichte stijl hanteren) minder goed geëvalueerd zouden worden dan managers die een gender-rol congruente stijl hanteren. Ook werd de invloed van waargenomen gender identiteit op de evaluatie van managers bestudeerd. De evaluatie van managers werd op verschillende manieren geoperationali-

seerd. Allereerst werd de tevredenheid van werknemers met het optreden van hun managers bestudeerd, gemeten met een vragenlijst. Verder werd de evaluatie van managers gemeten door middel van drie effectiviteitsindices: de omzet van de afdeling, het ziekteverzuim op de afdeling en de servicekwaliteit van de afdeling, zoals vastgesteld door een klantenpanel.

Managers die een gender-rol incongruente managementpositie bekleden worden niet slechter geevalueerd, zoals verondersteld was. Integendeel, de gegevens laten voor de werknemers-tevredenheid en servicekwaliteit een tegenovergestelde tendens zien: Mannelijke managers die feminien-getypeerde afdelingen leiden en vrouwelijke managers die masculien-getypeerde afdelingen leiden krijgen hogere scores op deze evaluatiematen dan mannelijke managers op masculiene afdelingen en vrouwelijke managers op feminiene afdelingen.

Er is geen bewijs gevonden voor het veronderstelde gender-rol congruentie effect van leiderschapsstijlen op de werknemer-tevredenheidsmaat. Werknemers zijn meer tevreden met zowel mannelijke als vrouwelijke managers naarmate managers meer mensgericht, charismatisch en verantwoording gevend leiderschap laten zien. Dus voor de stereotiep feminiene leiderschapsstijlen is geen gender-rol congruentie effect gevonden. Voor de stereotiep masculiene leiderschapsstijl taakgerichtheid is in plaats van een gender-rol congruentie effect een gender-rol contrast effect gevonden. Werknemers zijn meer tevreden met vrouwelijke managers naarmate zij meer taakgericht leiderschap laten zien. Voor mannelijke managers had taakgerichtheid geen invloed op de tevredenheid van hun werknemers.

De effecten van leiderschapsstijlen op de drie effectiviteitsmaten zijn minder eenduidig. Taakgericht en charismatisch leiderschap blijken geen enkel effect te hebben op de effectiviteitsmaten. Verder wordt de effectiviteitsmaat omzet, noch door sekse noch door één van de leiderschapsstijlen van een manager voorspeld. Servicekwaliteit blijkt samen te hangen met een meer mensgerichte en verantwoording gevende leiderschapsstijl. Voor de effectiviteitsmaat ziekteverzuim is voor vrouwelijke managers een gender-rol congruentie effect gevonden. Het ziekteverzuim binnen afdelingen geleid door een vrouwelijke manager neemt af naarmate vrouwelijke managers een meer mensgerichte en verantwoording gevende leiderschapsstijl hanteren. Deze stijlen hebben geen invloed op het ziekteverzuim van afdelingen geleid door een mannelijke manager.

Tot slot blijkt gender-identiteit de werknemer-tevredenheid te voorspellen, maar anders voor mannelijke dan voor vrouwelijke managers. Werknemers van vrouwelijke managers zijn het meest tevreden met androgyne managers vergeleken met feminiene, masculiene en ongedifferentieerde managers. Werknemers van mannelijke managers daarentegen zijn het meest tevreden met feminiene managers in vergelijking met masculiene, androgyne en ongedifferentieerde managers. Daarentegen laat de effectiviteitsmaat ziekteverzuim zien dat ziekteverzuim het laagst is voor feminiene vrouwelijke managers en masculiene mannelijke managers. Op de andere effectiviteitsmaten werd geen effect van gender identiteit gevonden.



In hoofdstuk 6 tenslotte, zijn de resultaten van de meta-analyse en de veldstudie samengevat en in een meer algemeen kader geplaatst, zijn methodologische kwesties besproken en zijn de praktische en theoretische consequenties die volgen uit dit proefschrift bediscussieerd. De meta-analyse liet zien dat sekseverschillen klein en contextgebonden zijn. Vrouwelijke leidinggevers geven meer democratisch en meer transformationeel leiding dan mannelijke leidinggevers, vooral wanneer zij zich bevinden in gender-rol incongruente organisatiecontexten. De veldstudie liet zien dat mannelijke en vrouwelijke managers niet verschillen in leiderschapsstijl of in waargenomen genderidentiteit. Ook blijken de individuele verschillen in leiderschapsstijl niet direct samen te hangen met de gender-typing van de afdeling. Maar, wanneer naar de verwachte waarden van de stijlen wordt gekeken, lijkt het erop dat managers die leiding geven aan een afdeling waar zij uit de toon vallen (dat wil zeggen mannelijke managers van een feminie afdeling en vrouwelijke managers van een masculiene afdeling), meer van alle leiderschapsstijlen laten zien. Dit laatste resultaat werd ook gevonden in de meta-analyse van hoofdstuk 2.

Het veldonderzoek dat in dit proefschrift werd beschreven liet verder zien dat femininiteit een belangrijk kenmerk is van het leiderschap van managers. Mannelijke managers die een meer femiene identiteit hebben, danwel een meer stereotiep feminie leiderschapsstijl hanteren blijken succesvol te zijn. Voor vrouwelijke leidinggevers ligt het enigszins anders. Femininiteit in identiteit en leiderschapsstijl is weliswaar belangrijk, maar draagt vooral bij aan succes wanneer vrouwelijke managers dit weten te combineren met masculiniteit in identiteit en stijl. Dit is een verrassend resultaat dat in tegenstelling staat tot de gender-rol congruentie theorie die in de inleiding werd besproken. Toekomstig onderzoek zou zich dan ook bezig moeten houden met de vraag wanneer en waarom vrouwelijke leidinggevers die zich gender-rol incongruent gedragen, soms worden gediscrimineerd en soms worden overgewaardeerd.

De praktische implicatie van deze resultaten is dat er geen aanleiding is om te veronderstellen dat vrouwelijke leidinggevers minder geschikte leidinggevers zijn omdat zij een andere leiderschapsstijl zouden gebruiken. Er zijn meer overeenkomsten dan verschillen tussen mannen en vrouwen. Ook is er geen aanleiding te veronderstellen dat mannen en vrouwen leiding zouden moeten geven op afdelingen die 'passen bij hun sekse'. Mannelijke en vrouwelijke leidinggevers blijken het even goed, over het algemeen zelfs enigszins beter te doen als zij op gender-rol incongruente afdelingen werken.



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## Appendix 2.1

Characteristics of studies included in the meta-analysis: Setting, Style, Rater type, Effect size, Sex-compositions, and Peculiarities.

| author/study   | setting  | style <sup>1</sup>      | rater type                         | effect size (C.I.95) <sup>2</sup>                           | sex-composition <sup>3</sup> |                     | remarks   |
|--|--|-------------------------|------------------------------------|---|------------------------------|---------------------|---|
|  |  |                         |                                    |   | subordinates                 | management          |   |
| Bass, Avolio & Atwater, 1996:<br>study 1               | (USA)<br>-Fortune 50 firm managers,<br>women: 68 % high, 32% lower<br>men: 72% high, 27% lower   | TRF-1<br>TRA-1          | subordinates<br>subordinates       | -.21 (-.35/- .07)<br>+.12 (-.02/+.26)                       | .75                          | .66                 | managers selected subordinates and received<br>feedback<br>confounding with organizational factors likely     |
|  | study 2  | TRF-1<br>TRA-1          | subordinates<br>subordinates       | -.19 (-.44/+ .05)<br>-.05 (-.29/+ .19)                      | .46                          | .60                 | confounding with organizational factors likely<br><br>managers selected subordinates and received<br>feedback |
|  | study 3  | TRF-1<br>TRA-1          | subordinates<br>subordinates       | -.07 (-.20/+ .06)<br>-.05 (-.18/+ .08)                      | .42                          | .46                 | confounding with organizational factors likely  |
| Carless, 1998  | level 1-4 branch managers<br>international bank (Australia)  | TRF-2<br>TRF-3<br>TRF-3 | supervisor<br>subordinates<br>self | -.31 (-.54/- .08)<br>-.03 (-.26/+ .20)<br>-.29 (-.52/- .06) | .15                          | .65                 | 3 measures (MLQ, LPI and GTL) were merged<br>for self and subordinate ratings                                 |
| Dhillon & Nagrath, 1988                                | university students (India)<br>experiment  | TA-4<br>INT-4           | self<br>self                       | -1.00 (-1.35/- .65)<br>+.23 (-.10/+ .56)                    | not<br>applicable            | not<br>applicable   | most variance explained by smoking or not-<br>smoking   |
| Dhillon, 1989  | high school students (India)<br>experiment   | TA-4<br>INT-4           | self<br>self                       | -.21 (-.45/+ .03)<br>-.03 (-.27/+ .21)                      | not<br>applicable            | not<br>applicable   | birth order explained most variance   |
| Doherty, 1997  | inter university administrators<br>(Canada) mid-level managers   | TRF-1<br>TRA-1          | subordinates<br>subordinates       | -.42 (-.81/- .02)<br>+.31 (-.09/+ .70)                      | unknown                      | .68                 | sex of leader confounded with age and<br>possession of graduate degree  |
| Druskat, 1994  | members of religious orders (USA)<br>mid-level managers  | TRF-1<br>TRA-1          | subordinates<br>subordinates       | -.30 (-.35/- .25)<br>+.29 (+.24/+ .35)                      | all male/<br>female          | all male/<br>female | sex of leader and sex of rater confounded   |
| Gardiner & Tiggemann, 1999:<br>study 1: male-dominated | (Australia)<br>industries such as academia, the<br>automotive industry and information<br>technology<br>managers at mid-level or above | TA-5<br>INT-5           | self<br>self                       | -.70 (-1.22/- .18)<br>-.17 (-.68/+ .34)                     | .85                          | .85                 | confounding with organizational factors likely  |
|  | study 2: female-dominated  | TA-5<br>INT-5           | self<br>self                       | -.31 (-.82/+ .20)<br>-.78 (-1.30/- .25)                     | .15                          | .15                 | confounding with organizational factors likely  |

|                                  |   |        |              |                                  |                   |                   |  |
|----------------------------------|---|--------|--------------|----------------------------------|-------------------|-------------------|--|
| Gibson, 1995:<br>study 1: Norway | variety of industries, company sizes<br>and locations<br>mixed level managers           | DA-6   | self         | -.14 (-.73/+45)                  | unknown           | .55               | confounding with organizational factors likely   |
|                                  |   | TA-6   | self         | -.01 (-.59/+58)                  |                   |                   |  |
|                                  |   | INT-6  | self         | -.07 (-.65/+52)                  |                   |                   |  |
| study 2: Sweden                  | variety of industries, company sizes<br>and locations<br>mixed level managers           | DA-6   | self         | +.07 (-.46/+61)                  | unknown           | .55               | confounding with organizational factors likely   |
|                                  |   | TA-6   | self         | +.40 (-.14/+93)                  |                   |                   |  |
|                                  |   | INT-6  | self         | -.32 (-.85/+22)                  |                   |                   |  |
| study 3: Australia               | variety of industries, company sizes<br>and locations<br>mixed level managers           | DA-6   | self         | +.00 <sup>†</sup> (-.49/+50)     | unknown           | .55               | confounding with organizational factors likely   |
|                                  |   | TA-6   | self         | +.47 (-.03/+97)                  |                   |                   |  |
|                                  |   | INT-6  | self         | -.33 (-.83/+16)                  |                   |                   |  |
| study 4: USA                     | practicing managers participating in a<br>managerial assessment<br>mixed level managers | DA-6   | self         | -.26 (-.85/+33)                  | unknown           | .55               |  |
|                                  |   | TA-6   | self         | -.12 (-.71/+46)                  |                   |                   |  |
|                                  |   | INT-6  | self         | +.08 (-.51/+67)                  |                   |                   |  |
| Jantzi & Leithwood, 1996         | elementary and secondary school<br>principals (Canada)                                  | TRF-7  | subordinates | -.28 (-.49/-.08)                 | .28               | .68               | confounding of leader sex with schooltype and<br>sex of raters   |
| Jensen, White & Singh, 1990      | managers health care organization<br>(USA)  | INT-8  | subordinates | reported ns. (0) <sup>§</sup>    | unknown           | unknown           |  |
|                                  |   | TA-8   | subordinates | reported sign. (-1) <sup>§</sup> |                   |                   |  |
| Johnson, 1993                    | students acting as manager in<br>organizational simulation (USA)                        | DA-9   | observations | -.22 (-.84/+40)                  | not<br>applicable | not<br>applicable | sex-composition manipulated<br>(two subordinates, one manager)   |
|                                  |   | INT-9  | observations | -.09 (-.71/+53)                  |                   |                   |  |
|                                  |   | TA-9   | observations | +.18 (-.44/+80)                  |                   |                   |  |
|                                  |   | INT-9  | self         | -.41 (-1.03/+22)                 |                   |                   |  |
|                                  |   | INT-9  | subordinates | -.52 (-1.15/+11)                 |                   |                   |  |
| Komives,<br>1991a                | hall directors (USA)<br>low-level managers  | TRF-1  | self         | +.40 (-.07/+87)                  | .44               | .42               | possible confounding of sex-composition of<br>subordinates and sex of manager  |
|                                  |   | TRA-1  | self         | +.32 (-.15/+78)                  |                   |                   |  |
|                                  |   | DA-10  | self         | -.56 (-1.03/-.09)                |                   |                   |  |
|                                  |   | TA-10  | self         | +.70 (+.23/+1.18)                |                   |                   |  |
|                                  |   | INT-10 | self         | -.09 (-.55/+37)                  |                   |                   |  |
| 1991b                            |   | TRF-1  | subordinates | +.08 (-.09/+24)                  |                   |                   | interaction manager sex and subordinate sex not<br>significant   |
|                                  |   | TRA-1  | subordinates | +.11 (-.05/+27)                  |                   |                   |  |
| Lee, Smith & Cioci, 1993         | high-school principals (USA)<br>mid-level managers                                      | TRF-11 | subordinates | -.06 (-.13/+02)                  | .56               | .90               | confounding of teacher and principal sex   |
| Lewis & Fagenson-Eland, 1998     | leaders of federal government agency<br>(USA)<br>first, second and third line managers  | TA-5   | self         | +.63 (+.26/+99)                  | unknown           | .61               | 125 leader/supervisor pairs,<br>mixed support for structural factors, no support<br>for interaction gender and structure |
|                                  |   | TA-5   | supervisor   | +.22 (-.14/+58)                  |                   | .88               |  |
|                                  |   | INT-5  | self         | -.04 (-.40/+32)                  |                   | .61               |  |
|                                  |   | INT-5  | supervisor   | +.02 (-.34/+38)                  |                   | .88               |  |

|                                     |   |                          |                                    |   |                   |                   |  |
|-------------------------------------|---|--------------------------|------------------------------------|---|-------------------|-------------------|--|
| Maher, 1997                         | evening students (USA)  | TRF-1<br>TRA-1           | subordinates<br>subordinates       | reports ns. (0) <sup>5</sup><br>reports ns. (0) <sup>5</sup>  | unknown           | unknown           | correlation between actual and stereotypical perceptions for male subordinates                             |
| Pratch & Jacobowitz, 1996           | student facilitators of MBA (USA)<br>low level managers         | TA-12<br>INT-12          | self<br>self                       | +1.06 (+.42/+1.71)<br>-.85 (-1.48/-.22)   | unknown           | .65               |  |
| Rinfret & Lortie-Lussier, 1997      | public service managers (Canada)<br>top and mid-level managers  | INT-13<br>TA-13<br>DA-13 | self<br>self<br>self               | -.33 (-.94/+2.9)<br>-.27 (-.89/+.35)<br>-.20 (-.81/+.42)  | unknown           | .58               | confounding sex with tenure, age, position, non-work situation, educational level and organizational level |
| Sakata & Kurokawa, 1992:<br>study 1 | students acting as leader, co-leader<br>and subordinate (Japan) | TA-14                    | observation                        | reports sign. (+1) <sup>5</sup>   | not<br>applicable | not<br>applicable |  |
| study 2                             |   | TA-14<br>INT-14<br>TA-14 | observation<br>observation<br>self | reports sign. (-1) <sup>5</sup><br>reports sign. (+1) <sup>5</sup><br>reports sign. (-1) <sup>5</sup> | not<br>applicable | not<br>applicable | leadership style was influenced by masculinity/femininity of task and interacted with sex.                 |
| Wheatley, Amin, & Maddox, 1991      | MBA-experienced students (USA)<br>simulation                    | DA-15 self               |                                    | -.15 (-.54/+.23)  | not<br>applicable | not<br>applicable |  |

<sup>1</sup> TRF = Transformational leadership; TRA = Transactional leadership; INT = Interpersonal leadership; TA = Task leadership; DA = Democratic versus autocratic styles, 1 = Multifactor Leadership Questionnaire (MLQ, Bass & Avolio, 1989); 2 = Global Transformational Leadership Scale (GTL, Carless, Wearing & Mann, 2000); 3 = merge of LPI (Leadership Practices Inventory, Kouzes & Posner, 1990) + MLQ + GTL; 4 = Bass Orientation Inventory, (Bass, 1962); 5 = Leadership Behavior Description Questionnaire (LBDQ, Stogdill, 1963); 6 = Leadership Effectiveness Questionnaire (LEQ, Flamholtz, 1986); 7 = Instrument by Jantzi & Leithwood (1996); 8 = Value Survey Module (VSM, Hofstede, 1982); 9 = Observation Instrument by Johnson (1993); 10 = Achieving Styles Inventory (ASI, Lipman-Blumen & Leavitt, 1979); 11 = Administrator and Teacher Survey, (ATS, Moles, 1988); 12 = Personality Research Form-E (PRF, Jackson, 1989); 13 = instrument by Rinfret and Lortie Lussier, (1997); 14 = instrument by Sakata and Kurokawa, (1992); 15 = Management Practices Questionnaire (MPQ, Haire, Ghisselli & Porter, 1966).

<sup>2</sup> Positive effect sizes indicate that male managers use style more, negative effect sizes indicate that female managers use style more. C.I.95 = 95 % Confidence Interval.

<sup>3</sup> Proportion men among subordinates, or among leaders.

<sup>4</sup> d = +.0044

<sup>5</sup> Between brackets is the value for d used in the 'all reports' analysis.



## Appendix 3.1.A

*Items and Factor Loadings of the Supervisory Behavior Description Questionnaire: Principal Axis Factoring, Varimax Rotated (Dutch original and [English translation])*

| item: mijn verkoopmanager ... [my manager...]   | Factor Solution |          |
|---|-----------------|----------|
|   | factor 1        | factor 2 |
| <i>People-oriented leadership:</i>  |                 |          |
| 23. Is goed bereikbaar voor mij<br>[... can be easily approached]   | .80             | -.08     |
| 44. Steunt mij in mijn werk<br>[... supports me in my work]   | .80             | .08      |
| 37. behandelt mij als zijn/haar gelijke<br>[... treats me as his/her equal]   | .77             | -.16     |
| 10. Stelt mij op mijn gemak wanneer ik met hem/haar praat<br>[... makes me feel at ease when talking with him]  | .75             | -.03     |
| 40. Is vriendelijk voor mij<br>[... is friendly to me]  | .75             | -.13     |
| 06. Beloont mij wanneer ik goed werk heb geleverd<br>[... rewards me when I have delivered good work]   | .74             | .10      |
| 42. Geeft mij complimenten wanneer ik mijn werk goed doe<br>[... compliments me on a good job]  | .73             | .00      |
| 36. Bevordert een goede verstandhouding tussen mij en mensen van andere afdelingen<br>[... encourages a good understanding between me and people in other departments]          | .73             | .25      |
| 13. Bevordert een goede verstandhouding tussen mij en de bedrijfsleider en productgroep leider<br>[... encourages a good standing between me and the business and sales leader] | .69             | .13      |
| 05. Brengt suggesties van mij in praktijk<br>[... brings my suggestions into practice]  | .66             | .08      |
| 26. Helpt mij bij mijn persoonlijke problemen<br>[... helps me with personal problems]  | .63             | .11      |
| 19. Vind ik gemakkelijk te begrijpen<br>[... is easy to understand]   | .61             | -.10     |
| 31. Komt mij zoveel mogelijk tegemoet in privé zaken<br>[... makes an effort to meet my personal affairs]   | .55             | -.07     |
| 35. Stimuleert mij te werken aan de teamgeest<br>[... stimulates me to develop the team spirit]   | .50             | .38      |
| 02. Probeert mijn goedkeuring te krijgen over belangrijke zaken<br>[... makes an effort to get my approval on important matters]  | .44             | .25      |
| <i>Task-oriented leadership</i>   |                 |          |
| 34. Spoort mij vaak tot grotere inspanning aan<br>[... urges me to greater efforts]   | -.04            | .71      |
| 38. Moedigt mij aan om harder te werken<br>[... encourages me to work harder]   | .07             | .69      |
| 01. Vraagt mij om beter te presteren<br>[... asks me to perform better]   | -.09            | .64      |
| 27. Dringt erop aan dat ik mijn werk precies volgens de voorgeschreven werkwijze uitvoer<br>[... insists that I carry out my work according to prescribed methods]              | -.05            | .64      |
| 28. Geeft mij kritiek op slecht werk<br>[... criticizes me for bad work]  | .04             | .62      |

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|   |      |     |
|---|------|-----|
| 18. Beslist tot in de puntjes wat ik moet doen en hoe ik het moet doen<br>[... decides in great detail what I ought to do and how I should do it] | -.29 | .59 |
| 09. Zorgt ervoor dat ik zo hard mogelijk werk<br>[... makes me work as hard as possible]  | .12  | .59 |
| 25. Houdt de touwtjes stevig in handen waar het mijn werk betreft<br>[... is pulling the strings in matters concerning my work]                   | .15  | .59 |
| 41. Vraagt mij offers te brengen in het belang van de afdeling<br>[... asks me to make sacrifices in the interests of the department]             | .16  | .49 |
| 15. Maakt mij duidelijk welke doelstelling gehaald moet worden<br>[... makes it clear to me what the targets are to be met]                       | .50  | .29 |

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## Appendix 3.1.B

*B. Items of the Charisma and Empowerment Leadership Scales.*

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item: mijn verkoopmanager ... [my manager ...]

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*Charisma*

16. Is een manager om trots op te zijn  
[... is a manager to be proud of]
11. Is een voorbeeld voor mij  
[... is an example to me]
22. Is heel bekwaam in al het werk dat hij/zij onderneemt  
[... is very competent in all the work s/he does]
29. kan iedere hindernis nemen  
[... is able to take any hurdle]
4. Geeft mij het gevoel dat onze afdeling aan een gemeenschappelijk doel werkt  
[... makes me feel that our department shares a common goal]
39. maakt mij bewust van belangrijke gemeenschappelijke waarden, aspiraties en idealen  
[... makes me aware of important common values, aspirations and ideals]
7. Heeft mijn volledige vertrouwen  
[... enjoys my full trust]

*Empowerment*

30. Geeft mij zoveel mogelijk zelfstandigheid in mijn werk  
[... gives me as much autonomy as possible in my work]
24. Heeft vertrouwen in mij  
[... has confidence in me]
14. Geeft mij de ruimte om mijn werk naar eigen goeddunken in te richten  
[... gives me the freedom to arrange my work as I see fit]
20. Is zich bewust van mijn kwaliteiten en mogelijkheden voor de organisatie  
[... is aware of my qualities and possibilities for the organization]
3. Vindt het belangrijk dat ik tevreden ben met mijn werk  
[... underscores my satisfaction with the job]
32. Zet zich in voor mijn maximale ontplooiing in de organisatie  
[... does his/her utmost for my development in the organization]
17. laat mij duidelijk voelen dat hij/zij mijn meerdere is  
[... makes me feel that s/he is my superior]
-



Appendix 3.1.C

Satisfaction scales: Factor Loadings of Satisfaction Items after Principal Factor Analysis, Varimax Rotated.

| item:   | Factor solution |          |          |
|---|-----------------|----------|----------|
|   | factor 1        | factor 2 | factor 3 |
| <i>Satisfaction with the manager</i>  |                 |          |          |
| 1. Ik ben heel tevreden met mijn verkoopmanager<br>[ I am very satisfied with my manager]   | .87             | .25      | .03      |
| 2. Ik vind mijn verkoopmanager erg goed in zijn/haar werk<br>[I think that my manager is very good at his/her work]   | .87             | .21      | .05      |
| 3. Ik zou liever voor een andere manager werken<br>[I would rather work for another manager]  | -.81            | -.15     | .03      |
| 4. Ik denk dat mijn verkoopmanager beter is dan andere managers<br>[I think my manager is better than other managers]   | .65             | .16      | .06      |
| 5. Mijn verkoopmanager onderschat mij (item removed from scale)<br>[My manager underestimates me]   | -.62            | -.13     | .16      |
| <i>Satisfaction with work</i>   |                 |          |          |
| 9. Ik vind mijn werk leuk<br>[I enjoy my work]  | .11             | .79      | -.26     |
| 6. Ik ga iedere dag met plezier naar mijn werk<br>[Everyday, I go to work with pleasure]  | .26             | .74      | -.20     |
| 12. Ik vind [de organisatie] een prettige organisatie om voor te werken<br>[I think that [the organization] is a pleasant organization to work for]                               | .16             | .73      | .13      |
| 13. Ik krijg voldoende mogelijkheden en kansen om mij in<br>[de organisatie] te ontwikkelen<br>[I have ample opportunities and occasions to develop myself in [the organization]] | .25             | .62      | .23      |
| 10. Ik zou nog liever vandaag dan morgen stoppen met dit werk<br>[I would rather quit my job today, if not sooner]  | -.27            | -.54     | .36      |
| <i>Inability to cope with work</i>  |                 |          |          |
| 11. Ik voel mij onhandig in dit werk<br>[I feel clumsy in my work]  | .05             | -.03     | .77      |
| 7. Ik kan de verantwoordelijkheden niet goed aan<br>[I cannot handle the responsibilities in my work well]  | -.23            | .12      | .74      |
| 8. Ik ben goed in mijn werk<br>[I am good in at job]  | .17             | .27      | -.62     |

Appendix 3.1.D

*Trait items of the Gender Identity Questionnaire*

| Femininity items:          | Masculinity items:           |
|----------------------------|------------------------------|
| Afhankelijk [Dependent]    | Ambitieux [Ambitious]        |
| Attent [Considerate]       | Avontuurlijk [Adventurous]   |
| Begrijpend Understanding]  | Besluiteloos [Indecisive]    |
| Bescheiden [Modest]        | Cynisch [Cynical]            |
| Besluiteloos [Indecisive]  | Dominant [Dominant]          |
| Emotioneel [Emotional]     | Geestig [Witty]              |
| Gevoelig [Sensitive]       | Handig [Dexterous]           |
| Hartelijk [Warm-hearted]   | Joviaal [Jovial]             |
| Lichtgeraakt [Touchy]      | Moedig [Courageous]          |
| Nieuwsgierig [Curious]     | Nonchalant [Nonchalant]      |
| Sentimenteel [Sentimental] | Ondernemend [Enterprising]   |
| Sociaal [Social]           | Opstandig [Rebellious]       |
| Spontaan [Spontaneous]     | Technisch [Technical]        |
| Tactvol [Tactful]          | Wilskrachtig [Strong-willed] |
| Zorgzaam [Caring]          | Zelfverzekerd [Self-assured] |

Appendix 4.1.  
Model Deviances (-2 log likelihood) of the different models Predicting Leadership Styles

| Estimated Models                                      | Estimated deviance                        |                     |                      |                        |
|---|---|---------------------|----------------------|------------------------|
|   | People-oriented                           | Task-oriented       | Charismatic          | Empowerment            |
| Baseline models                                       |   |                     |                      |                        |
| Parameters  | Deviance (-2 log likelihood)              |                     |                      |                        |
| 1. Intercept-Only model                               | 1036.82                                   | 963.91              | 1119.98              | 1042.56                |
| 2. Conditional-Intercept- model                       | 1014.71 <sup>o</sup>                      | 961.81              | 1096.47 <sup>o</sup> | 1022.76 <sup>o</sup>   |
| Models with department / manager variables            |   |                     |                      |                        |
| Parameters (N fixed, N random) <sup>a</sup>           | Deviance (-2 log likelihood) <sup>b</sup> |                     |                      |                        |
| 3. A. Sex (1)   | 1014.69                                   | 958.17 <sup>#</sup> | 1096.47              | 1022.75                |
| 4. B. Gender Type Department (1)                      | 1014.69                                   | 959.13              | 1096.05              | 1022.67                |
| 5. C. Sex x Gender Type Department (3)                | 1013.33                                   | 956.07              | 1094.89              | 1021.87                |
| 6. Team size (1)                                      | 1014.51                                   | 961.14              | 1096.25              | 1022.55                |
| 7. Team size x C (7)                                  | 1007.89                                   | 948.84 <sup>#</sup> | 1090.21              | 1015.85                |
| Models with shop-assistant and cross- level variables |   |                     |                      |                        |
| Parameters (N fixed, N random) <sup>a</sup>           | Deviance (-2 log likelihood) <sup>b</sup> |                     |                      |                        |
| 8. Sex (1,2)  | 1013.02                                   | 961.20              | 1095.94              | 1021.34                |
| 9. Sex x A (3,2)                                      | 1013.00                                   | 956.98              | 1095.87              | 1021.31                |
| 10. Sex x C (7,2)                                     | 1009.17                                   | 950.03              | 1091.68              | 1018.28                |
| 11. Hours (1,2)                                       | 1002.15**                                 | 952.52*             | 1092.90              | 1009.20**              |
| 12. Hours   | 1000.36**                                 | 946.07**            | 1091.35              | 1009.17**              |
| 13. Hours x B (3,2)                                   | 998.85**                                  | 947.30**            | 1090.03              | 1008.38**              |
| 14. Hours x C (7,2)                                   | 998.16 <sup>#</sup>                       | 936.35**            | 1089.33              | 1006.93 <sup>#</sup>   |
| 15. D. Manager gender identity (3,5)                  | 879.03***                                 | 915.69***           | 967.74***            | 944.61*** <sup>c</sup> |
| 16. Team size x D (7,5)                               | 876.80***                                 | 909.15***           | 961.23***            | 938.64***              |
| 17. Manager gender identity x A (7,5)                 | 873.32*** <sup>c</sup>                    | 911.19***           | 958.41***            | 933.10*** <sup>c</sup> |

Note. \*\*\* p<.001, \*\* p<.01, \* p<.05, <sup>#</sup> p<.10, compared to the three-level-conditional intercept model (model 2).

<sup>o</sup> p < .0001, compared to the two-level Intercept-Only model (model 1),

<sup>a</sup> In brackets are the numbers of the fixed and the number of random parameters that are estimated additional to the four fixed and one random parameters of the Conditional-Intercept model (model 2)

<sup>b</sup> Significance of deviance-difference from a model to the Conditional-Intercept model is tested in a Chi-squared distribution with *Df* that is equal to the numbers of parameters added (see numbers between brackets,<sup>a</sup>).

<sup>c</sup> The model only converges when one random parameter is omitted.



Appendix 5.1.

*Model Deviances (-2 log likelihood) for the Prediction of Satisfaction with the Manager*

| Estimated models for satisfaction                     |                                |   |                                |
|---|--------------------------------|---|--------------------------------|
| Baseline models                                       |                                |   |                                |
| Parameters  | -2 log likelihood              |   |                                |
| 1. Intercept-Only model                               | 1211.79                        |   |                                |
| 2. Conditional-Intercept model                        | 1194.86 <sup>o</sup>           |   |                                |
| Models with department / manager variables            |                                |   |                                |
| Parameters (N fixed, N random) <sup>a</sup>           | -2 log likelihood <sup>b</sup> |   |                                |
| 3. A. Sex (1)   | 1194.23                        |   |                                |
| 4. B. Gender type department (1)                      | 1194.05                        |   |                                |
| 5. C. A x B (3)                                       | 1193.39                        |   |                                |
| Models with shop-assistant and cross- level variables |                                |   |                                |
| Parameters (N fixed, N random) <sup>a</sup>           | -2 log likelihood <sup>b</sup> | Parameters (N fixed, N random) <sup>a</sup> | -2 log likelihood <sup>b</sup> |
| Sex and work hours                                    |                                | Leadership styles                           |                                |
| 6. D. Sex (1,2)                                       | 1191.66                        | 12. People-oriented (1,2)                   | 960.96***                      |
| 7. Sex x A (3,2)                                      | 1191.29                        | 13. People-oriented x A (3,2)               | 959.93***                      |
| 8. Sex x C (7,2)                                      | 1189.22                        | 14. People-oriented xA x D (7,5)            | 957.61***                      |
| Gender identity                                       |                                | 15. Task-oriented (1,2)                     | 1194.82                        |
|   |                                | 16. Task-oriented x A (3,2)                 | 1194.21                        |
| 9. Femininity x A (3,2)                               | 1049.06**                      | 17. Task-oriented x A x D (7,5)             | 1185.47                        |
| 10. Masculinity x A (3,2)                             | 1108.24*                       |   |                                |
| 11. Femininity x Masculinity x A (7,3)                | 1007.06***                     | 18. Charisma (1,2)                          | 933.05***                      |
|   |                                | 19. Charisma x A (3,2)                      | 930.41***                      |
|   |                                | 20. Charisma x A x D (7,5)                  | 929.04***                      |
|   |                                |   |                                |
|   |                                | 21. Empowerment (1,2)                       | 1013.4***                      |
|   |                                | 22. Empowerment x A (3,2)                   | 1012.45***                     |
|   |                                | 23. Empowerment x A x D (7,5)               | 1010.46***                     |

*Note.* <sup>o</sup>  $p < .0007$ , compared to the two-level Intercept-Only model (model 1), \*\*\*  $p < .001$ , \*\*  $p < .01$ , \*  $p < .05$ , compared to the three-level-conditional intercept model (model 2).

<sup>a</sup> In brackets are the numbers of the fixed and the number of random parameters that are estimated additional to the four fixed and one random parameters of the Conditional-Intercept model (model 2)

<sup>b</sup> Significance of deviance-difference from a model to the Conditional-Intercept model is tested in a Chi-squared distribution with *df.* that is equal to the numbers of parameters added (see numbers between brackets,<sup>a</sup>).

1. Het gender-rol congruentie effect is niet zo robuust als vaak wordt aangenomen. De resultaten van de studies in dit proefschrift wijzen eerder op het omgekeerde effect.
2. Adviezen aan vrouwelijke leidinggevendenden om toch vooral te conformeren aan de vrouwelijke gender-rol kunnen gedeeltelijk in de wind worden geslagen (dit proefschrift).
3. Als het zo is dat leiders een voortrekkersrol hebben voor gedrag van mannen, is de grotere waardering van feminiene mannelijke managers (dit proefschrift) hoopvol voor de emancipatie van mannen in het algemeen.
4. "Hillary Clinton is a virtual Rorschach test for contemporary ambivalence about powerful women" (Kaye, 1993).
5. Dat de huidige publicatiedruk in de wetenschap een grote reproductie van studies tot gevolg heeft is een zegen voor de meta-analist.
6. "Women are as much degraded by their mistaken notions of female excellence as they are by their supposed inferiority" (Mary Wollstonecraft, 1759-1797).
7. De onderwaardering van zorgtaken in onze samenleving heeft niet alleen invloed op huidige en toekomstige problemen in de zorg, maar ook op de positie van vrouwen op de arbeidsmarkt.
8. Er moet een maximumleeftijd worden ingevoerd tot waarop studenten de was door hun moeder mogen laten doen.
9. Burqa's en korte truitjes zijn beide uitingen van dezelfde seksualisering van het vrouwelijk lichaam.
10. De door veel studenten gebezigde aanduiding van de universiteit met "school" is een uitdrukking van de teloorgang van het wetenschappelijk klimaat op universiteiten welke mede in de hand zijn gewerkt door invoering van de OV-studentenkaart en de tempobeurs.
11. "Schrijven is niet leuk, geschreven hebben wel" (Ciska Dresselhuys).



This book is about the leadership styles of male and female leaders in differently gender-typed organizational contexts, and how they are evaluated. The quasi-experimental field study that is reported aims to disentangle the knot of context factors that may moderate sex differences in leadership styles, and the evaluation and effectiveness of leaders. The relation between gender identity and leadership is also explored.

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